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TRANSACTIONS

OF THE

Worcester County Horticultural Society,

FOR THE YEAR 1875;

COMPRISING

THE REPORTS OF THE COMMITTEES AT THE ANNUAL EXHIBITION; THE REPORT OF THE LIBRARIAN; THE ANNUAL REPORT OF THE SECRETARY FOR THE YEAR 1875; THE BY-LAWS OF THE SOCIETY; AND AN OBITUARY NOTICE OF SAMUEL H. COLTON.

REPORTS.

REPORT ON APPLES.

COMMITTEE.—Wm. T. Harlow, *Chairman ;* James F. Allen, O. B. Hadwen, Samuel H. Colton, Stephen S. Foster, Samuel A. Knox, J. K. L. Pickford, Sylvanus Sears, of *Worcester ;* Cyrus White, Henry Marble, of *Millbury ;* Lewis A. Maynard, of *Shrewsbury ;* and Isaac B. Hartwell, of *Oxford.*

Rarely has there been a shorter or poorer crop of apples than the present year, and never was there greater contrast between the crops of two successive years than between those of 1874 and 1875. That the abundance of last year would be followed by scarcity this, was to have been expected. To Herbert Spencer's illustrations of Rhythm as a prime law of the universe, may be added the apple crop of New England. Not more certainly doth day follow night — ebb-tide follow flood — perihelion follow aphelion, and kosmos follow chaos, than a short crop of apples follows an abundant one.

That the Baldwin bears abundantly only in the even year (A. D.) has been extensively remarked and is beyond dispute. But the fact of more abundant crops alternating with less abundant, though unknown and unremarked in the case of other varieties than the Baldwin by the average apple-grower is just as true of Roxbury Russetts, Hubbardston Nonesuches, Gravensteins, Porters, Northern Spies, Holden Pippins, Maidens Blushes, and every other variety, as it is of Baldwins, and is only one instance of an all-pervading law. The noticeable thing about it is that the bearing year for all varieties is the same — not that there are not exceptional trees of all varieties that produce larger crops in the odd than in the even years. This is true of the Baldwin as well as the others — but *una hirundo*, &c. Exceptions do not disprove the rule. It is substantially true that the even years are the years of plenty as regards apples of all varieties.

One year the market is glutted with apples and the grower is unable to realize any profit on his crop. The next year there are few apples to be had and the price is such that no customer can *afford* to buy them at all. One year the best quality is unsaleable at a dollar a barrel; the next it readily sells at $4, and fruit that the previous year would have gone to the cider mill is actually taken to market and goes quickly at $2, or even more. In view of these facts the question has been mooted whether it be not possible artificially to change the bearing year of apple trees and compel them to bear apples when they are likely to be wanted?

Sanguine theorizers answer affirmatively and say that a tree may be made to bear in the odd year by preventing it from bearing in the even year, and its more abundant crops will afterwards occur in the odd years. *Credat Judæus* until it be established by future experience. Meantime I challenge it as contrary to all past experience, so far as recorded or remembered. It is within the personal recollection of every careful observer now in middle life that during the last thirty years, although the apple trees of New England have been frequently prevented from bearing in the even year by natural causes — frosts, insects, and sometimes unknown causes — there has never been a single large crop of apples in an odd year. In accordance with the sanguine answer to the mooted question, the next year following the failure of an apple crop in an even year from any natural cause, ought to have been thenceforth established as the bearing year. That this result has not followed would seem to point to the existence of some occult cause of the even year periodicity of apple plenty.

Nevertheless let those who believe they can change the bearing year of apples persist in their experiments. If they can establish their theory as a fact, it is a most important fact, and well worth knowing. If an apple-grower who last year had 1000 barrels of marketable apples to sell and waited for customers till he found one-half of his apples rotten and then sent the rest to the cider maker, could by some art have deferred his last year's crop till this year, he would have made his occupation the envy of every merchant and manufacturer in the country. It is not a priori impossible — the discovery of such an art. Neither is it impossible but that human wit may some time invent some art whereby to keep apples over from a year of plenty to a year of scarcity. Find a way to keep apples as you can keep wheat, and every apple-grower in the country, as well as you, the finder thereof, is a made man.

Notwithstanding the shortness of the apple crop, the Annual Exhibition of apples by this Society was highly creditable. The contrast between

the exhibitions of the present and last year was less than might have been expected. Exhibitors competed for nearly every premium offered by the Society.

Among other good results from abolition of the old system of classification of fruits, repeatedly recommended by Secretary Lincoln before its wisdom came to be perceived by all, is the great relief experienced by Committees in making awards. Just decision between large collections composed of different varieties of fruit was more than difficult,—it was simply impossible. To compare and decide between competing lots of the same variety is always possible and rarely difficult. It is to be hoped that the simple plan adopted the present year of offering graded premiums for single plates of ten specimens will be continued as the permanent policy of the Society.

WM. T. HARLOW,
For the Committee.

We return the following award of premiums :

For the best ten Astrachan (Red), no entry	$ 3 00
For the second best, no entry	2 00
For the third best, no entry	1 00
For the best ten Baldwin, Joseph Pratt	3 00
For the second best, E. M. Banning	2 00
For the third best, S. E. Fisher	1 00
For the best ten Cogswell, Ashley Moore	3 00
For the second best, O. B. Hadwen	2 00
For the third best, no entry	1 00
For the best ten Duchess of Oldenburg, no entry	3 00
For the second best, no entry	2 00
For the third best, no entry	1 00
For the best ten Golden Sweet, no entry	3 00
For the second best, A. H. Sears	2 00
For the third best, no entry	1 00
For the best ten Gravenstein, John Pierce, of W. Boylston	3 00
For the second best, Addison Lovell, of W. Boylston	2 00
For the third best, A. H. Sears	1 00
For the best ten Holden Pippin, Joseph Pratt	3 00
For the second best, C. T. Foster, of Holden	2 00
For the third best, O. B. Hadwen	1 00
For the best ten Hubbardston Nonesuch, S H. Smith	3 00
For the second best, D. S. Goddard	2 00
For the third best, J. L. Ellsworth	1 00

For the best ten Leicester Sweet, S. S. Foster.....$ 3 00
For the second best, none worthy of premium..... 2 00
For the third best, none worthy of premium..... 1 00
For the best ten Lyscom, Joseph Pratt..... 3 00
For the second best, Mrs. Solomon Parsons..... 2 00
For the third best, Mrs. Geo. A. Chamberlain 1 00
For the best ten Maiden's Blush, A. H. Sears..... 3 00
For the second best, Mrs. Geo. A. Chamberlain..... 2 00
For the third best, no entry..... 1 00
For the best ten Mother, S. H. Smith..... 3 00
For the second best, Eri Saunders..... 2 00
For the third best, Joseph Pratt..... 1 00
For the best ten Northern Spy, Samuel Putnam..... 3 00
For the second best, Mrs. Geo. A. Chamberlain..... 2 00
For the third best, E. M. Banning..... 1 00
For the best ten Peck's Pleasant, S. S. Foster..... 3 00
For the second best, Henry Marble, of Millbury..... 2 00
For the third best, S. Sears..... 1 00
For the best ten Porter, Eri Saunders..... 3 00
For the second best, A. H. Sears..... 2 00
For the third best, S. S. Foster..... 1 00
For the best ten Rhode Island Greening, D. S. Goddard..... 3 00
For the second best, Joseph Pratt..... 2 00
For the third best, A. H. Sears..... 1 00
For the best ten Roxbury Russett, Henry Marble, of Millbury.... 3 00
For the second best, A. H. Sears..... 2 00
For the third best, Mrs. Marshall Flagg..... 1 00
For the best ten Sheppard's Sweet, no entry..... 3 00
For the second best, no entry..... 2 00
For the third best, no entry..... 1 00
For the best ten Sweet Bough (Early), no entry..... 3 00
For the second best, no entry..... 2 00
For the third best, no entry..... 1 00
For the best ten Tallman's Sweet, no award..... 3 00
For the second best, Newell Wood, of Millbury..... 2 00
For the third best, no award..... 1 00
For the best ten Twenty Ounce, Joseph Pratt..... 3 00
For the second best, no award..... 2 00
For the third best, Henry Marble, of Mil bury..... 1 00
For the best ten Washington Royal, no entry worthy of premium. 3 00

For the second best, no entry worthy of premium.....$ 2 00
For the third best, no entry worthy of premium..... 1 00
For the best ten Washington Strawberry, C. T. Foster, of Holden. 3 00
For the second best, S. S Foster..... 2 00
For the third best, no entry..... 1 00
For the best ten Williams' Early Red, A. H. Sears..... 3 00
For the second best, Edw. S. Howes..... 2 00
For the third best, no entry..... 1 00

GRATUITIES.—

For Yellow Bellflower, Jno. Broadbent..... 2 00
For Jersey Pippin, A. H. Sears..... 2 00
For Fall Harvey, Jno. Pierce, of W. Boylston..... 2 00
For collection, Isaac Mills..... 2 00

REPORT ON GRAPES, PEACHES, &c.

Committee.—William H. Earle, *Chairman;* Thomas M. Lamb, W. W. Cook, Horatio Phelps, Thomas A. Dawson, Frank J. Kinney, Charles Goodwin, of *Worcester;* Paul Whitin, George Cruickshanks, of *Whitinsville;* F. M. Marble, of *Grafton;* and Joseph C. Lovell, of *West Boylston.*

GRAPES.

Under Glass.—For the best two clusters of Black Hamburg, W. T. Merrifield.....$ 5 00
For the second best, S. Salisbury..... 3 00
For the third best, P. L. Moen..... 1 00
For the best two clusters of any other named Black Grape, W. T. Merrifield — Victoria..... 3 00
For the second best, P. L. Moen — Wilmot..... 2 00
For the best two clusters of White Muscat, S. Salisbury — Royal Muscadine..... 3 00
For the second best, P. L. Moen — Cannon Hall Muscat..... 2 00
For the best two clusters of White Frontignan, no award..... 3 00
For the second best, P. L. Moen..... 2 00

For the best two clusters of any other named White, P. L. Moen, White Nice ..... $ 3 00
For the second best, W. T. Merrifield, Syrian 2 00
For the third best, P. L. Moen 1 00
For the best two clusters of Grizzly Frontignan, P. L. Moen 3 00
For the second best, W. T. Merrifield 2 00
OPEN AIR.—For the best four clusters of Concord, F. J. Kinney .. 3 00
For the best four clusters of Delaware, Curtis Jenkins 3 00
For the best four clusters of Diana, no award 3 00
For the best four clusters of Hartford Prolific, F. J. Kinney 3 00
For the best four clusters of Iona, no entry 3 00
For the best four clusters of Rogers No. 3, (Massasoit) no entry .. 3 00
For the best four clusters of Rogers No. 9, (Lindley), Horatio Phelps 3 00
For the best four clusters of Rogers No. 15, (Agawam), Wm. H. Earle — best ripened 3 00
For the best four clusters of Rogers No. 19, (Merrimac), F. J. Kinney 3 00
For the best four clusters of Salem, Wm. H. Earle 3 00
For the best four clusters of Worden, Chas. Nash 3 00

PEACHES.

For the best collection of six varieties, not less than ten specimens each, no entry 8 00
For the second best, no entry 5 00
For the third best, no entry 2 00
Newell Wood had six plates but had two the same.
For the best three varieties of twelve specimens each, Newell Wood, of Millbury 5 00
For the second best, Jos. C. Lovell, of W. Boylston 3 00
For the best one variety of twelve specimens, Fred Hancock—Late Crawford 3 00
For the second best, A. J. Eaton — Late Crawford 2 00
For the third best, Geo. Barber — Susquehanna 1 00

GRATUITIES.—

A. J. Eaton, 2 extra plates 1 00
J. C. Lovell, Seedling 1 00
S. S. Foster, Seedling 1 00
F. J. Kinney, Seedling 1 00

PLUMS.

For the best collection of not less than four named varieties, no entry ..... $ 5 00
For the second best, no entry 3 00
For the best three varieties, no entry 3 00
For the second best, no entry 2 00
For the best single plate, Wm. H. Earle 3 00
For the second best, S. S. Foster 1 00

QUINCES.

For the best collection of not less than three varieties, no entry ... 5 00
For the second best, no entry 3 00
For the best twelve Orange Quinces, C. T. Foster, Holden 3 00
For the second best, Mrs. Harvey Sturtevant 2 00
For the best twelve of any other variety, no entry 2 00
For the second best, no entry 1 00

GRATUITIES.—

George W. Rogers 1 00
Newell Wood 1 00
S. S. Foster 1 00

CRAB APPLES

For the best display, F. J. Kinney 3 00
For the second best, Willie B. Schofield 2 00
For the best dish of twenty-four specimens of any named variety, John C. Whitin, of Whitinsville 2 00
For the second best, F. J. Kinney 1 00

WM. H. EARLE,

For the Committee.

REPORT ON PLANTS, FLOWERS, &c.

COMMITTEE.—Samuel Flagg, *Chairman ;* George E Francis, James L. Burbank, Patrick W. Driscoll, Clarendon Harris, David S. Messinger, Henry Woodward, Lyman J. Taft, and Henry L. Shumway, of *Worcester ;* and John F. Johnson, of *Leominster.*

Although the Annual Exhibition for the year 1875 was held some three weeks later than the year previous, still the display was very creditable and satisfactory. The early frosts of October had done less than the lateness of the season to bring the display up to the usual standard. Of cut flowers, the contributions were limited, but under existing circumstances, abundant and well selected. The contributions of plants by Amateurs were unusually large, while those from our professional gardeners were not only large but superior to previous exhibitions. In the department of rare and new, a manifest improvement was shown. Of Floral Designs, a better display in taste and variety was never exhibited in our Halls. This may have been the more noticeable from the scarcity of cut flowers, which last, however, evinced the usual zeal of the contributors in keeping the stands well supplied with fresh cuttings. This should be noted as no small part of the labor attending an exhibition of a week's duration. The Trustees, I am happy to report, have decided to continue all future exhibitions but two days.

The display of flower stands and brackets, for parlor use, was very fine. These were the contribution of Mr. Bradford I. Peabody.

We had also on exhibition a recent invention of Mr. Wm. F. Wheeler, of Dorchester, for destroying insects, mildew, etc., from plants, shrubs, and trees. This consists of a brass globe which can be easily attached to any common hose. It has been satisfactorily tested by our Florists, and thus far surpasses all inventions for the like purpose. The method of using the distributor, as given by Mr. Wheeler, is as follows : Make a

cotton ball, tied into shape by string to prevent the ragged ends from being sucked into the outlet of the machine by the force of the water passing into it; saturate this ball with kerosene and place within the globe; the force of the water overcomes the antagonism of the kerosene and carries it along until it is all expended. No danger whatever results from this mode. For the most delicate plants it would be expedient to have two or three of the globes screwed together, thereby giving a double quantity, or two or more compounds at a time; for most purposes one is sufficient. For out-door plants, shrubs and trees, this machine is effectual in destroying all caterpillars, canker worms, currant worms, red spiders, mealy bugs and all insects which infest our greenhouses. It is also peculiarly adapted as a disinfectant in stables, slaughter-houses, water-closets, etc. The watering-pot accompanying the distributor is adapted to window culture and for the use of Amateurs. The application of these compounds should be made daily and at the time that the watering or syringing the plants is done. The foliage of the plants is thereby made healthy and natural, while the use of fumigators is wholly done away with. Of these compounds the tobacco-soap is the specific for killing the greenaphis and thrips. Sulphur and tobacco-soap and kerosene in alternation destroys the mealy bug and red spider. Guano to supply the water with ammonia rendering it soft and stimulating to the plants. All these compounds should be used as the case indicates, and when the pest is removed their use should be persevered in as a preventive.

Descriptions and use of this machine may be obtained by addressing Wm. F. Wheeler, Columbia street, Dorchester, Mass.

As the Annual Exhibition of 1876 is to be held with a view of our Society being represented at the U. S. Centennial Exhibition at Philadelphia. I trust our many contributors will keep this in mind. Although the department of plants and flowers hardly bears an even chance with the fruits and vegetables, still something may be done worthy of our position as Horticulturists and Florists. If our gardens and hot-houses cannot be represented, why not bring the productions from our fields and forests to bear a share. A nicely arranged volume of wild flowers, grasses and ferns from the tasty hands of many of our younger members would speak well for our Society, to say nothing of the credit due the contributor.

The following premiums and gratuities were awarded by your Committee :—

ASTERS.—

For the best display, Mrs. Geo. Estabrooks.....$ 4 00
For the fourth best, Mrs. M. E. Woodward 1 00

BASKET.—(Hanging.)—

For the best, Mr. Stephen Salisbury..... 3 00
For the second best, Mrs. T. L. Nelson..... 2 00
For the third best, Mrs. David Scott..... 1 00

BOUQUETS.—(Hand.)—

For the best pair, Mr. Stephen Salisbury..... 3 00

DESIGN.—(Floral.)—

For the best, Miss E. H. Ward, Shrewsbury.....$ 6 00
For the second best, Mrs. T. L. Nelson..... 4 00

FLOWERS.—(Cut.)—

For the best stand, Mrs. David Scott..... 3 00
For the second best, Mrs. Charles E. Brooks..... ... 2 00
For the best arranged basket, Mrs. T. L. Nelson..... 3 00
For the second best, Mrs. Charles E. Brooks..... ... 2 00

GLADIOLUS.—

For the best collection, Miss Abbie Lovell, W. Boylston..... 5 00
For the best specimen Spike, Miss Abbie Lovell, " 1 00
For the best Seedling, Miss Abbie Lovell, " 1 00

PANSIES.—

For the best display, Mr. Charles A. Keyes..... 3 00
For the second best, Mrs. George H. Estabrook..... 2 00
For the third best, Mrs. Shaff, of Leicester... ..... 1 00

PINKS.—(China.—

For the best display, Mrs. Shaff, Leicester..... 3 00
For the second best, Mr. Stephen Salisbury..... 1 00

PETUNIAS.—

For the best display, Miss E. P. Bangs..... 3 00
For the second best, Mrs. S. E. Fisher..... 2 00

VERBENAS.—

For the best display, Mr. Charles A. Keyes..... ... 3 00
For the best Seedling, Mrs. Charles E. Brooks..... 2 00

PLANTS WITH ORNAMENTAL FOLIAGE.—

For the best twelve, Mr. Stephen Salisbury..... 20 00
For the second best, Mr. William T. Merrifield..... 12 00
For the best six, Mr. William T. Merrifield..... 10 00
For the second best, Mr. Stephen Salisbury..... 5 00

PLANTS IN BLOOM.—

For the second best four, Mr. Stephen Salisbury..... 5 00

RARE AND NEW PLANTS.—

For the best collection, Mr. William T. Merrifield 10 00

FERNS AND LYCOPODS.

For the best collection, Mr. Stephen Salisbury... .....$10 00

For the second best, Mr. William T. Merrifield..... 5 00

PLANTS FROM AMATEURS.—

For the best twelve, Mrs. David Scott..... 6 00

For the second best, Mrs. T. L. Nelson..... 4 00

FERNERY.—

For the second best, Mrs. David Scott..... 4 00

For the third best, Mrs. T. L. Nelson..... 2 00

GRATUITIES.—

For dish of Cut Flowers, Mrs. Mowry, Shrewsbury..... 1 00

For dish of Wild Flowers and Berries, Mrs. Shaff, Leicester.... 2 00

For dish of Drummond's Phlox, Mrs. S. F. Bennett, Holden, 1 00

For basket of Dried Leaves and Ferns, Mrs. S. E. Fisher..... 1 00

For basket of Wild Berries, Mr. Walter F. Brooks..... 1 00

For basket of English Daisies, Mr. F. J. Kinney..... 1 00

For basket Green-house Flowers, Mrs. A. D. Wood, West Newton..... 3 00

For Floral Design, Mrs. T. L. Nelson..... 2 00

For " " of Asters and Verbenas, Mr. Chas. A. Keyes, 1 00

For Star of Cut Flowers, Mrs. C. E. Parker, Holden..... 3 00

For Stand and Bird of Immortelles, Mr. Stephen Salisbury... 3 00

For design for Flower Garden, Mr. Wm. T. Merrifield..... 3 00

For dish and vase of Cut Flowers, Mrs. David Scott..... 2 00

For Bouquets of Wild Flowers, Mrs. Shaff, Leicester. 1 00

For Bouquets of Berries and Autumn Leaves, Mrs. M. E. Woodward..... 2 00

For stand of Immortelles, Mrs. Shaff, Leicester..... 1 00

For collection of Cockscombs, Mr. J. Fawcett..... ... 1 00

For collection of rare and new Plants, Mr. James Comley, of Lexington..... 15 00

For collection of Green-house Plants, Mr. W. W. Cook..... 10 00

For collection of Caladiums, Mr. J. C. Whitin, Whitinsville... 5 00

Respectfully submitted,

SAMUEL FLAGG, *Chairman.*

REPORT ON PEARS.

COMMITTEE.—Henry L. Parker, *Chairman;* Henry Phelps, John C. Newton, James Draper, Alfred Davis, S. Harrison Knox, of *Worcester;* Newell Wood, of *Millbury;* and William H. Johnson, of *Northborough.*

At the Annual Exhibition the present year, premiums for collections were for the first time dispensed with, the award for the best single plates being proportionately increased. The result has fully justified the experiment. No better exhibition of single plates has ever been held by the Society.

Among the plates which deserve especial mention were the Beurre Diel of the State Lunatic Hospital, and several plates of the Bartlett and Flemish Beauty, although the two latter varieties are not included in the list for which premiums were offered, the committee on premiums supposing that these varieties would be far past their prime at so late a date as the day fixed for the Annual Exhibition.

For the Secretary's premium of $20 for the best fifteen varieties of new pears, there was but one competitor. As a collection of fine specimens of fine pears the display was unexceptionable; but the fact that several of the varieties were of from twenty to twenty-five years standing — the Catherine Lambré being dated by Leroy in 1850, and the Willermoz in 1848 — and that one variety, the Gen. Todleben, had been cultivated and exhibited many years previously by a member of the Society, rendered it so far questionable whether the collection came within the terms of the Secretary's offer, that the Committee did not feel justified in giving the exhibitor the benefit of the doubt.

If this liberal offer is to remain good for the coming year, we would suggest that the term "new pears" be so qualified, limited, or defined that the same quandary in making the award shall not again arise.

The blight has been unusually prevalent the past year. The origin and nature of this disease which has become the bane and terror of all fruit-growers is still involved in much obscurity ; but the results of the observations of the microscopist seem to establish the theory that it is a fungus.

Prof. Taylor, of Washington, D. C., pronounces it "a local fungus fermentation of the genus torula — and which may be developed under any one of a number of causes. Every condition which will prevent the bark or shoots from ripening will foster under high temperatures in the presence of organic acid (which is always present in green or unripe wood), and vegetable nitrogeneous matter one or more species of Torulacic fungi. Stagnant water in the ground containing the drainings of decomposing organic matter is always charged with Torulacic breeding spores and germinal matter which, if absorbed by the roots, will certainly contaminate the sap of the tree. When small branches are attacked it may prove best to remove them, but the main branches and trunk may be saved by prompt action.

The stained bark should be removed as soon as observed and before the stain has girdled the branch or trunk, as may be. If not removed, the sapwood will be poisoned. In the case of atmospheric blight, that is when the fermentation is produced from the immediate action of high temperatures on the outer bark, favored by previous conditions, the fermentation will proceed from the surface to the interior, but in the case of root absorption the fermentation will proceed from the sapwood to the exterior. The removal of the tree to a more favorable place, or drainage will probably save the affected tree in the case of root absorption."

Barry, in his work on Fruit Gardening, says : "Blight has never been known to originate on the dry, sandy loam of Long Island, not even with heavy manuring, the drought of mid-summer always ripening the shoots so completely that the leaves drop off long before frost commences."

As early as 1867, Mr Thomas Meehan presented the theory that the fire blight was the work of an extremely active parasitic fungus.

President Hoopes in 1870, in his address to the fruit growers of Pennsylvania, demonstrated from the observations of the microscope that the disease is of fungoid origin.

This theory is also confirmed by Dr. J. Gibbons Hunt, Chairman of the Microscopical Section of the Philadelphia Academy of Natural Sciences, in a letter to the editor of the Gardener's Monthly, dated June 21st, 1875.

What are the predisposing causes of this fungus growth, and what are

the best methods of dealing with the disease, repeated observations and experiments only can fully determine.

If the theory advanced be correct, it is to be presumed that the application of stimulating manures late in the season, or in such a manner as to cause a succulent growth which the early frosts should not find fully hardened and mature, would render the tree susceptible to the disease. And on the same basis whatever will arrest fungus growth of any kind, may be recommended as preventives. As for example, any of the mineral acids — hot lye, a recipe for the yellows in peaches, also supposed to be a species of fungus growth — or even a strong solution of common salt.

The Committee respectfully submit the following awards :

CLASS 1.—

For the best twelve Beurre Bosc, Stephen Salisbury	$ 5 00
For the second best, Wm. H. Earle	3 00
For the third best, Willie B. Schofield	1 00
For the best twelve Beurre Clairgeau, S. J. Brimhall	2 00
For the best twelve Beurre d'Anjou, Henry Phelps	5 00
For the second best, Alfred Davis	3 00
For the third best, Daniel Kinsley	1 00
For the best twelve Beurre Diel, Lunatic Hospital	3 00
For the second best, Geo. W. Rogers	1 00
For the best twelve Beurre Hardy, A. J. Warfield	2 00
For the second best, V. P. Townsend	1 00
For the best twelve Beurre Langelier, Dr. Wm. Workman	3 00
For the second best, Fred G. Stiles	1 00
For the best twelve Beurre Superfin, Moses Church	3 00
For the second best, John C. Whitin, of Whitinsville	2 00
For the third best, James F. Allen	1 00
For the best twelve Dix, O. B. Hadwen	2 00
For the best twelve Doyenné du Comice, Stephen S. Foster	5 00
For the second best, V. P. Townsend	3 00
For the third best, Edward W. Lincoln	1 00
For the best twelve Duchesse d'Angoulême, Alfred Davis	5 00
For the second best, Geo. W. Rogers	3 00
For the third best, S. J. Brimhall	1 00
For the best twelve Durandeau, no award	3 00
For the second best, no award	1 00
For the best twelve Glou Morceau, no entry	5 00
For the second best, no entry	3 00
For the third best, no entry	1 00

For the twelve best Howell, Isaac Mills.....$ 2 00
For the second best, no award..... 1 00
For the best twelve Josephine de Malines, Edward W. Lincoln 3 00
For the second best, no entry..... 2 00
For the best twelve Lawrence, T. K. Earle..... 5 00
For the second best, S. J. Brimhall..... 3 00
For the third best, Alfred Davis..... 1 00
For the best twelve Louise Bonne de Jersey, Mrs. George A. Chamberlain..... 5 00
For the second best, S. S. Foster..... 3 00
For the third best, Alfred Davis..... 1 00
For the best twelve Marie Louise, V. P. Townsend..... 3 00
For the second best, Newell Wood, of Millbury..... 2 00
For the best twelve Mt. Vernon, Jos. C. Lovell, W. Boylston 2 00
For the best twelve Onondaga, Wm. H. Earle..... 2 00
For the second best, S. J. Brimhall..... 1 00
For the best twelve Paradis d'Automne, Wm. E. Desper..... 3 00
For the second best, V. P. Townsend..... 1 00
For the best twelve Seckel, John C. Whitin, of Whitinsville.. 5 00
For the second best, V. P. Townsend..... 3 00
For the third best, E. W. Lincoln..... 1 00
For the best twelve Sheldon, S. A. Arnold..... 3 00
For the second best, W. G. Maynard..... 2 00
For the third best, George Gardner..... 1 00
For the best twelve St. Ghislain, R. W. Merriam..... 3 00
For the second best, Mrs. Geo. A. Chamberlain..... 1 00
For the best twelve St. Michel, John C. Newton..... 3 00
For the second best, Stephen S. Foster..... 1 00
For the best twelve St. Michel Archange, John C. Newton... 2 00
For the second best, George M. Pierce..... 1 00
For the best twelve Urbaniste, D. S. Goddard..... 3 00
For the second best, F. H. Dewey..... 2 00
For the best twelve Vicar of Winkfield, P. L. Moen..... 3 00
For the second best, V. P. Townsend..... 2 00
For the best twelve Washington, Edward W. Lincoln..... 3 00
For the second best, no entry..... 1 00
For the best twelve Winter Nelis, James F. Allen..... 5 00
For the second best, Mrs. Geo. A. Chamberlain..... 3 00
For the third best, Alfred Davis..... 1 00

CLASS 2. (New Pears.)

For the best twelve Beurre de l'Assomption, E. W. Lincoln	$ 3 00
For the second best, no entry	1 00
For the best twelve Souvenir du Congres, no entry	3 00
For the second best, no entry	1 00
For the best twelve Brockworth Park, no entry	2 00
For the best twelve Duchesse de Bordeaux, no entry	2 00
For the best twelve Dr. Reeder, no entry	2 00
For the best twelve Helene Gregoire, no entry	2 00
For the best twelve Huyshe's Prince Consort, no entry	2 00
For the best twelve Rutter, no entry	2 00
For the best twelve Emile d' Heyst, no entry	2 00
For the best twelve St. Crispin, no entry	2 00
For the best twelve Doyenne Hovey, no entry	2 00
For the best twelve Souvenir d' Esperen, no entry	2 00
For the best twelve Gen. Todleben, no entry	2 00
For the best twelve Duc de Bordeaux, no entry	2 00

GRATUITIES.—

William H. Earle, for Plate of Fruit	1 00
Newell Wood, of Millbury, for Doyenné Boussoc	1 00

REPORT ON VEGETABLES.

COMMITTEE.—Alexander Marsh, *Chairman;* Thomas R. Norcross, J D. Lovell, O. L. Hatch, Rufus Carter, Daniel Bemis, Charles Belcher, and William H. Hackett, of *Worcester.*

The Committee on Vegetables have attended to their duty, and beg leave to report: The Trustees have made great alterations in their requirements in regard to the number of each article, and of the number of articles, there being no premiums offered for the largest collections. This is much to the satisfaction of the Committee. It is to be regretted that those bringing their vegetables should not fetch them in season to have them classed as well as their apples and pears ; and it is unfortunate that the Society does not take some means to have a better display on the tables, by enforcing a system that will place each article which is to come in competition for premiums, side by side, so that the Committee shall not overlook specimens, as under the present arrangement. The Exhibition opened September 28th, the week following the Agricultural Fair. It may be a question yet to be settled when it will be for the best interest of the Society to hold their Annual Fair, but we will leave it to wiser heads to determine. Your Committee are fully aware that in the short time allotted to them it is impossible to do justice to all, but as they went at their work determined to have no preferences, they were very harmonious in their awards, whether right or wrong. The specimens were generally very good, and we are happy to say quite as good as we had reason to expect.

ALEXANDER MARSH,

Chairman of the Committee.

BEANS.—

For the best four varieties, State Lunatic Hospital.....$ 1 00

BEETS.—

For the best six Long Blood, P. L. Moen..... 2 00
For the best six Early Bassano, P. L. Moen..... 2 00
For the best six Egyptian, F. J. Kinney..... 2 00
For the best six Sugar, Sylvanus Sears..... 2 00
For the best six Turnip, Thomas A. Dawson..... 2 00

CABBAGES.—

For the best two Large Flat Brunswick, Sylvanus Sears..... 3 00
For the best single specimen, Sylvanus Sears..... 2 00
For the best two Drumhead, Simon E. Fisher..... 3 00
For the best single specimen Drumhead, weight not less than 30 lbs., no entry..... 1 00
For the best two Drumhead Savoy, Joseph Pratt..... 3 00
For the best single specimen, Sylvanus Sears..... 2 00
For the best two Early Sweinfurth, Simon E. Fisher..... 3 00
For the best single specimen, Simon E. Fisher..... 2 00
For the best two Red, State Lunatic Hospital..... 2 00
For the best single specimen, no entry..... 1 00
For the best two Savoy, Sylvanus Sears..... 3 00
For the best single specimen, no entry..... 2 00

CARROTS.—

For the best six Early Horn or Short Scarlet, Thos. A. Dawson, 2 00
For the best six Long Orange, Ashley Moore..... 2 00
For the best six Red, no entry..... 2 00
For the best six White, no entry..... 2 00

CAULIFLOWERS.—

For the best three specimens, no entry..... 3 00
For the best single specimen, no entry..... 1 00

CELERY.—

For the best six roots, F. J. Kinney..... 4 00
For the second best, John C. Whitin, of Whitinsville.... 2 00

CORN.—

For the best collection of Sweet, not less than five named varieties, Alden H. Sears..... 5 00
For the second best, Frank J. Kinney..... 3 00

For the best six ears of Sweet, Samuel Putnam.....$ 2 00
For the second best, Sylvanus Sears..... 1 00
For the best Yellow or Field, of twenty ears traced, F.J. Kinney, 2 00
For the second best, O. B. Hadwen.... ..... 1 00

CRANBERRIES.—

For the best peck, no entry..... ..... 1 00

CUCUMBERS.

For the best half peck for pickling, no entry.... ..... 2 00

EGG PLANT.—

For the best three specimens, State Lunatic Hospital..... 1 00

HORSE RADISH.—

For the best six roots, no entry..... . 1 00

MELONS.—

For the best two Water, Eben Jewett..... 3 00
For the second best, Joseph Pratt..... ..... 1 00
For the best Green Flesh, three specimens, no entry..... 2 00
For the best Yellow Flesh, three specimens, no entry..... 2 00

ONIONS.—

For the best four varieties, a half peck of each, Thomas A. Dawson 3 00
For the second best, no entry..... 2 00
For the best half peck of Red, State Lunatic Hospital..... 1 00
For the best half peck of Silver Skin, Samuel Putnam..... 1 00
For the best half peck of White Portugal, no entry..... 2 00
For the best half peck of Yellow Danvers, Samuel Putnam... 2 00

PARSNEPS.—

For the best six Guernsey, Ashley Moore..... 2 00
For the best six Hollow Crown, State Lunatic Hospital.... .. 2 00
For the best six Student, Sylvanus Sears..... 2 00
For the best six Short, no entry..... .... 2 00

POTATOES.—

For the best five named varieties, half a peck of each, V. P. Townsend..... 12 00
For the second best, F. J. Kinney..... 8 00
For the third best, Sylvanus Sears..... 4 00
For Lady Fingers, A. H. Sears, gratuity of..... 1 00

PUMPKINS.—

For the best three, weight not less than 20 lbs. each, Stephen Salisbury.....$ 2 00
For the second best, John Farwell..... 1 00

PEPPERS.—

For the best half peck, State Lunatic Hospital..... 1 00

SALSIFY.—

For the best six specimens, John C. Whitin, of Whitinsville. 1 00

SQUASHES.—

For the best three pure Crookneck, Henry L. Parker..... 2 00
For the best three pure Canada Crookneck, Sylvanus Sears... 2 00
For the best three pure Hubbard, Joab Hapgood, Shrewsbury, 2 00
For the best three pure Mammoth, P. L. Moen..... 2 00
For the best three pure Marblehead, Sylvanus Sears..... 2 00
For the best three pure Marrow, Alden Sears..... 2 00
For the best three pure Turban, N. H. Foster..... 2 00
For the best three pure Yokohama, Simon E. Fisher..... 2 00
Gratuity to Mrs. Sarah F. Bennett, for Spanish.. ..... 1 00

TOMATOES.—

For the best Boston Market, Thomas A. Dawson..... 2 00
For the best twelve Lester, State Lunatic Hospital..... 2 00
For the best twelve Tilden, Sylvanus Sears..... 2 00
For the best twelve Trophy, John C. Whitin, of Whitinsville. 2 00
For the best twelve of any other named variety, A. H. Bennett, Holden..... 2 00
Gratuity to W. H. Spooner, for Green Gage..... 1 00

TURNIPS.—

For the best six English or Flat, white or yellow, Alden Sears, 2 00
For the best six White Swedes, F. J. Kinney..... 2 00
For the best twelve Yellow Swedes, Sylvanus Sears..... 2 00

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society :

The Librarian does not propose to make an extended report on the comparative merits of the different volumes, purchased by the Library Committee, or the real value to the Society of the several Magazines which have been furnished for your perusal. He will therefore simply give you a plain statement as to the condition of the Library. One work of great value has been placed upon the shelves the past year which, in his opinion, requires special mention. I refer to Curtis' Botanical Magazine in 30 vols , 8vo., containing 2,007 colored plates. I saw it upon the shelves of the Massachusetts Society in Boston, and learned from the Librarian and other prominent gentlemen of the Society that they prized it highly.

It is believed the library has been used more the past year than in some preceding years ; the number of books taken from the library being about 300, while many have made use of the library at the room.

During the year the Society has been presented with a very handsome black walnut book-case, by our Secretary, Edward W. Lincoln, Esq., who has, ever since my connection with the Society, manifested a deep interest in its prosperity.

Annexed will be found the additions to the library since the last report of the Librarian.

Garden, The; Edinburg and London. 2 vols., 1874–5—8vo. Society.

Floral World, The; London. Vol. 8. Society.

American Naturalist, The; 1873. Vol. 7. Society.

Gardeners' Chronicle, The; 1874–5. London. 2 vols. Folio. Society.

American Agriculturist, The; Vol. 33 and 34; 1874–5. 2 vols. Folio. Society.

Horticulturist, The; Vol. 29 and 30; 1874–5. 2 vols. 4to. Society.

Floral Cabinet, The Ladies; Vol. 2 and 3. Society.

Country Gentleman, The; Vol. 39 and 40; 1874–5. Society.

Agricultural Gazette, The; 2 vols.; 1874–5. London. Folio. Society.

Gardeners' Monthly, the; 2 vols.; 16 and 17; 8vo. Society.

Villa Gardener, The; 2 vols.; 1874–5; 8vo. London. Society.

Vick's Floral Guide; 1874; 4to. Society.

Flore des Serres, Ghent, Belgium, Vol 19; 8vo. Illustrated.

Natural History of Plants; London; vol. 1 to 3 inclusive; 8vo. Illustrated. Society.

Rustic Adornments; London, 4to.; col. plates. Society.

A Leroy-Dictionnaire De Pomologie, Les Pommes; Paris. 2 vols., 8vo. Society.

Alpine Plants, second series. London; 8vo. Illustrated. Society.

Transactions of Massachusetts Horticultural Society; 1874–5. Pamphlet 8vo.; by E. W. Buswell, Sec.

N. H. Agriculture, Annual Reports 1871–2–3–4; 4 vols., octavo; by James V. Adams, Sec.

Report of Commissioner of Education, 1873; octavo; by John Eaton, Com.

Transactions of N. Y. State Agricultural Society, 1866 to 1871; 6 vols., by O. B. Hadwen.

Agriculture of Massachusetts, 1868 to 1874; 7 vols., by O. B. Hadwen.

Catalogue of Library of Massachusetts Horticultural Society, by E. W. Buswell, Sec.

Circulars of Information of the U. S. Bureau of Education, 1873 and 1874: bound in cloth; 1875, Nos. 1, 2, 3, 4 and 5, Pamphlets; bound in paper; by John Eaton, Com.

Curtis' Botanical Magazine, 3d series; 30 vols., 8vo.; 2,007 col. plates. Society.

It is proper for the Librarian to state that Curtis' Botanical Magazine is not wholly paid for. The whole cost of the entire work is $300.00, of which $114.00 has been paid. Dr. Francis, of the Library Committee, will explain to you more fully as to the purchase of the work.

The Librarian is happy to be able to state that only eight books are now out, from all that have been issued from the library for the past year, and those are in the hands of members, from whom they will be forthcoming when called for.

All which is respectfully submitted.

JOHN C. NEWTON,

Librarian.

HALL OF FLORA, Nov. 3d, 1875.

ANNUAL REPORT

OF THE

Secretary of the Worcester County Horticultural Society.

To the Members of the Worcester County Horticultural Society :

The Vernal Exhibition, holden on the 18th day of March, ultimo, besides being quite attractive in display, was also unusually well attended. The extreme severity of the weather prevented contributions that could not be offered without too great risk of exposure, and occasioned the loss of others which had been forwarded in undue expectation of a milder temperature.

No plants of *Azalea Indica* were exhibited, and some which were kept away because of the biting cold, would not have fulfilled the purpose held in view when a special prize was offered.

Neither were there any Hyacinths, although the omission is scarcely excusable, since the cultivation of them is so simple and their period of bloom so easily hastened or retarded.

But the very fine display of *Primula Sinensis*, by Mr. W. W. Cook, and of *Cyclamen Persicum*, by Hon. John C. Whitin, amply supplied all deficiencies. Our indebtedness is especially due to the latter gentleman, whose frequent choice contributions so often prove a chief attraction of our Exhibition; and as well to his skillful gardener, George Cruickshanks, for the zealous concern that has ensured his presence, upon many occasions, at no slight personal inconvenience.

This Vernal Exhibition, like the opening one of Roses and Strawberries, in early Summer, was witnessed by more people than ever attended similar displays since the foundation of the Society But it is to be regretted that tardiness — that besetting vice of the age — should have withheld so many, until too late, from a display which must have afforded them extreme satisfaction. It ought to be considered that contributors, from a distance, cannot await the convenience of visitors; but, having presented their specimens within the prescribed hours, cannot be blamed if they avail themselves of their sole means of returning home seasonably. At the same time it will not be denied that there are contributors (luckily few), who are so unreasonable as to think the Rules of the Society inapplicable to themselves; and who, therefore, upon too many occasions, subject the officers of the Society to inconvenience, and themselves to disappointment and loss.

The season of early Flower and Fruit was unpropitious. Backward and cold, with chilling rains and lingering snow-banks, even the Crocus hesitated to peep, and the bud of the Strawberry shrank from the harsh exposure. Therefore it chanced that our published Schedule could not be realized; and that changes, as in years past, were made imperative by absolute necessity. Upon personal consultation with every member of the committee, appointed and empowered by the Trustees to establish Premiums and determine the date of Exhibitions, it was concluded with entire unanimity that a postponement of the Strawberry Exhibition, for at least one week, would conduce to the best welfare of the Society. Of course the private interests of an individual, here and there, might suffer trivial injury; but the system of monetary premiums was not adopted to

"put money in thy purse."

Rather,— to render meet and proper award to him of whom a dead, nevertheless immortal, language, declares

"*Palmam qui meruit, ferat.*"

The insinuations of individual greed, ejected upon officers of the Society, which would come with a better grace from houses less vitreous; are indignantly repelled as the exclusive property, because solely characteristic of their source. "By their fruits ye shall know them." The only officers of this Society to whom Premiums were awarded left them, as is their wont, in the Treasury. The example is not patented, but was left free, with malice aforethought, for imitation by their disinterested censors.

Time, however, upon which they relied, *pede pulsanti*, justified your Committee, vindicating their action. Never before was such a display of

Strawberries seen upon the tables of the Society. For high color ;—for various and choice shades of flavor, when tested; and least and last, for size; the exhibition of this delicious fruit, in 1875, will be memorable upon our records as wholly unparalleled. Remembering the restricted fields within which our Fragarians are cramped; that their market is limited and, over and beyond all, penurious; and that Amateurs are more and more tempted to abandon a toil, at best without appreciation; the only source of wonder is, that any seedling should be exhibited, or that varieties of promise should be introduced and patiently developed to degrees of greater or less excellence. What might be accomplished by a change of system; by fostering experiment and rewarding effort or achievement, can only be inferred from observation of the result in other departments: notably the Apple and Pear, which would almost seem able to take care of themselves without further stimulus to home industry. A liberal prospective premium for a seedling Strawberry, Raspberry, Blackberry, &c., &c., cast upon the waters in good faith, might be borne back after many days. A Seedling! with seed sown,— germ watched,— development criticised, impregnation guarded and cross-fertilization prevented, or left to the exclusive use and behoof of the Democratic politicians:—why should not a Society like this, which can count in its necrology, WILLIAM LINCOLN and GEORGE JAQUES; COLTON, and him whose almost speaking likeness adorns our walls,—*facile princeps;*—originate as well as naturalize! Sports are well enough. The origin of the Seckel Pear is not defined with precision, although the parent tree, as far as is known, grows in sufficient proximity to entitle it to share in the Centennial of our Republic. Yet Pomology should be an exact, if also a tentative science; its Fruits illustrating selection rather than survival.

The cultivation of the Raspberry is steadily, if slowly, diminishing. Why ? — is not so easy to determine. The berry is attractive in appearance, and of luscious flavor. The only objection to it seems to be based upon the necessity of affording protection to the canes throughout the winter season. But the Strawberry cannot be left uncovered in assured reliance upon a mantle of snow. The grape-vine, that may put forth fresh and vigorous shoots in Spring, if simply extended upon the ground will be killed to the root when exposed, upon a trellis, to cutting winds and biting frost. The Raspberry yields profusely for weeks in succession. The berries can be picked by a person standing upright, which, in itself, is no slight recommendation to those of us who have stooped, for hours, in the blazing sun of July, over a Strawberry-bed. These Reports have never once omitted to urge upon the Pomologists of Worcester County

an assiduous, liberal, and persistent culture of the Raspberry. Their author has striven,— with what success you have been enabled to judge for yourselves,— to enforce precept by example. His suggestions upon this or other Horticultural matters, are made without reference to what, in current phrase, may "suit the market." He leaves it for the supple demagogue to "crook the pregnant hinges of the knee that thrift may follow fawning." Those who like can adapt their wares to their customers: supplying shoddy when wanted; furnishing the Wilson Strawberry to those who know nothing better; or, when "they ask for bread, giving a stone." But the Worcester County Horticultural Society, by accepting its charter, engaged to "advance the science and encourage and improve the practice of Horticulture." It fails to do so when it recommends the cultivation of a species of fruit merely because *it will sell!* When we cease to advise, everywhere and at all times, the cultivation of the best— because it is the best — our mission is ended; our charter should be relinquished; we should cease cumbering the ground. The members of the Society are once more urged to set out stools of the *Rubus Idaeus;* among the finer varieties of which your Secretary, from personal experience, would recommend the Franconia (if it can be obtained pure, as it has *not* been exhibited for years upon our tables), the Northumberland Fillbasket and Brinckle's Orange. Let the "market" glut itself with Thimbleberries, if it knows no better and will not be taught.

A gratifying feature of our Summer Exhibition — the unprecedented display of Currants — was noteworthy, as showing that line upon line and precept upon precept are not always wasted. Depressed and dismayed by the swift and destructive invasion of the *Abraxis grossulariata;* with their bushes almost exterminated before they had learned how to apply a remedy, or knew of one to apply, Pomologists had given up the hope of ever again enjoying this most certain, prolific, and beautiful of all Summer fruits. But renewed hope came with the knowledge that White Hellebore is fatal to this insect-pest. So that, within the last few years, the Currant has been rapidly resuming its proper position in our gardens and upon the tables of the Society. Not only in quality, but in the number of varieties shown by different contributors, did the Exhibition of 1875 merit attention. Still, while the true Pomologist will ever be ready, and even anxious to "prove all things;" in "holding fast to that which is good" he cannot go amiss if he sticks to the old Red Dutch or the newer La Versaillaise.

But one or two lots of Blackberries were entered upon the books of the Secretary. To those who have land enough it would appear that the

cultivation of this Bramble, as the English term the Blackberry, might commend itself. To all who have not, and who are destitute of a pair of buckskin breeches, its spines must be decidedly repellant. With rows sufficiently wide apart to permit the use of a cultivator, its growth ought not to be allowed so rank as to obstruct the pickers who are to follow in due time. To what extent the Wachusett merits its appellation of "Thornless," your Secretary is unable to testify from personal observation. Its hearty appreciation, however, by our zealous associate, Mr. Thomas A. Dawson, who proposes to extend his already considerable plantation, strongly encourages the hope that the Wachusett may be the variety so long desired. With regard to quality, nothing better need be sought. And, should it insist upon retaining its spines, it will only place itself in the same unalterable category with the veteran Democrat, who forgetteth not, neither doth he learn; or that "truly loyal" fellow-citizen, of whom it is as true now as of yore, that his hide cannot be bleached.

Commenting upon the International Exhibition at Cologne, in the German Empire, held during the current season and closed but recently, the accomplished Editor of the Gardeners' Chronicle (Eng.), remarks: "Of the practice of buying plants for Exhibition purposes, of which there "were so many obvious cases at Cologne and which, unfortunately, pre-"vails also in this country, we shall have more to say on another occasion. "It is a practice which if it be, as many consider, to some extent inevita-"ble, should be hedged round by restrictions, and should be done openly "and publicly, so that the public may know which exhibitor buys his "spurs and which wins them by his own skill." It is not impossible that a keen suspicion and close scrutiny might find application for this censure near home. But the instances are not numerous and probably innocence of intentional deceit would be pleaded. Yet the wrong is none the less that credit is obtained for skillful culture of Flower or Fruit than it would be were a man, upon the verge of bankruptcy, and in its actual contemplation, to collect every cent upon which he could lay his hands before he actually absconded. Horticulture is a poor pursuit indeed if not scrupulously honorable.

Your co-operation has been solicited by the UNITED STATES CENTENNIAL COMMISSION. What precise shape such co-operation can assume, your Secretary is unable, at present, to state. It has occurred to him, however, that you might in the event of a discontinuance of the ANNUAL AUTUMNAL EXHIBITION, propose premiums for Fruits that have originated within the County; in amount sufficient to compel a production of the very best specimens. Those specimens that gained the premiums

should become the property of the Society, to be exhibited at the proper time in Philadelphia. The County need not be ashamed of its parentage of the Holden Pippin, the Hubbardston Nonesuch; or, as suggested by our President, the Sterling. And, in this presence, may I not add also, among Pears, Earle's Bergamot? Should you conclude to comply with the request of the COMMISSION, it might be well to act in connection with the Massachusetts Horticultural Society. A display by ourselves alone would be meagre, even if space could now be secured: but it would, doubtless, in aid of that venerable Society, help achieve something for the fame and name of our ancient Commonwealth.

The Fifteenth Session of the AMERICAN POMOLOGICAL SOCIETY was held in the early Autumn, at Chicago, Illinois. Delegates were appointed by your Trustees, and some had the good fortune to be present, in the ripe fruits of whose observation you will probably participate. But not all returned that went out of our gates. Departing with an almost exuberant cheerfulness, anticipating personal enjoyment and instruction in measure unalloyed, probably any one of our number would have appeared a more likely victim for the insatiate archer than SAMUEL H. COLTON. The records of our Society will ever bear true witness to his assiduous service. The columns of the *Massachusetts Spy or National Ægis*, for more than a quarter of a century, attest to his interest in Pomology. His Reports, as Chairman of the Committee upon Apples, were carefully elaborated, and, besides being written in the Queen's English, were fraught with the results of a keen and life-long observation. He died, it may be said, in our service. What priceless seedling, not yet produced by our members, of Flower or Fruit, shall be his appropriate and perennial monument!

An unexpected relief from the plague of the Canker Worm was experienced during the last season. Of course there were orchards that appeared to be maintained for the sole purpose of perpetuating these insects. But such evils will doubtless be chronic so long as a heedless and sceptical generation refuses the wisdom of your Secretary, rejecting his advice to abate the nuisance by the application of State Constables. The Tent Caterpillar, however, more than supplied any deficiency in numbers of the Canker Worm. Of vastly easier suppression, because within instant or even cursory observation, how ought we to reproach ourselves with our lazy tolerance! A, keeps his trees clean and wholly free from the pest; his neighbor B, who gets nominated for Alderman or even Hog-Reeve, has faith in the multiplication-table and thinks that the only baptismal name is now as it was and shall ever be — Legion. At the last session of the General Court a petition from the Massachusetts Horticultural Society

setting forth the harm done by noxious insects, and praying for a remedy was presented and referred to the Committee on Agriculture, whereof this at least may be said in its behalf, that not all of its Members expect or deserve to be Governor. Constituted, as usual, of men whose minds are closed to instruction ; who exhaust knowledge by the process of Nature in her abhorrence of a vacuum ; and who prefer to keep the narrow tires of their mental organization in the deep and frozen ruts wherein they have travelled from infancy ; what else could stolid Bucolism do but give Charles M. Hovey, Francis Parkman, and Marshall P. Wilder "leave to withdraw!" Similar "leave" from the same source, ladies and Gentlemen of the Worcester County Horticultural Society ! has been proffered you in the past; nor, as the best that you could do, have you been slow to accept it. The ignorance which would exterminate the *Corvus* — most useful and most persecuted of birds — through its absurd chairman, relegates the *Turdus migratorius* to the same plane with the mocking-bird or nightingale.

His dissonant note greets the farmer's ear.
Never from earth-worms shall you be clear !
A winged tramp — I always shirk,—
Bumming my rations, but never work.
No Canker-Worm my gizzard shall cross,
Neither Curculio! my gain,—your loss.
The Doryphora may take the Potato
And, that cleaned out, fall back on Tomato.
But the beak of this *Turdus* was never expended
On noxious Insects; nor was it intended
That a bird so accomplished should even be harmed
By a stroke of hard work: or even alarmed
When the angry Pomologist fires off a discharge
At the *Turdus* — by General Court kept at large.

There would not seem to be any serious peril to the Commonwealth involved in a concession of the prayer of the Massachusetts Horticultural Society. The injury done by insects is so excessive and general, and is so rapidly increasing, that every grower of Grain, or Fruit, or Vegetables, is personally concerned to find a check or remedy. An inquiry by competent entomologists into their habits — carefully discriminating between the beneficial and noxious — would supply knowledge that is needed, which could work no detriment to the State and, possibly not harm even the Committee on Agriculture.

Closely connected with this subject of Noxious Insects is a fact, if such, asserted by the *Constitutionnel* of Paris, France, which says that "good news is being received from all the wine-growing districts. There is but one cry of joy and admiration in the vineyards at the magnificent appear-

ance of the vines. Since 1840, such promises of abundance were not seen." And yet what frightful stories have we not been told of the *Phylloxera Vastatrix!* How France had been swept as with a besom and, trivial obstacles like the English Channel surmounted — the almost fabulous vine at Hampton Court would be the next to succumb. Yet, after all, it appears that the Grape — co-eval with Noah — and of which it would at least be curious to determine the two species that were selected for that unique voyage in the Ark,— may be destined to furnish an exemplar of the survival of the fittest. The writer picked clusters of the BARRY, grown upon a Northern exposure and fairly ripe, on the 12th, and of IONA, well sheltered, on the 21st. days of October. And, *Phylloxera* to the contrary, his faith abides that the promise of a sure harvest was not restricted to corn or oats. Our American vines, certainly, seem vigorous enough.

The condition of the Library will be stated to you by the officer in whose especial charge it is placed. As Chairman of the Committee upon the Library, however, the writer would call your attention to the very valuable addition to it, within the last year, of the Third Series of Curtis' Botanical Magazine, in thirty volumes, illustrated with as much profusion as elegance. The Committee believed that the opportunity to make this purchase should not be lost, although the cost was such that its liquidation was necessarily spread over a period of three years. But the value of a Library like ours — the loss of which even now would be irreparable — consists mainly, and must continue to be found, in its possession of those costly works upon special or general subjects of Horticultural interest which individuals have not the means to procure. This policy, upon which the Committee have ever acted, will continue to guide them, unless in the discretion of the Trustees, they should be instructed to the contrary. The Committee advise the purchase of a suitable table upon which the Weekly and Monthly Magazines may be kept, for a while, that the members shall more and more incline to resort to the Hall of Flora for pleasant intercourse or instruction.

In his two-fold capacity of Chairman of the Committee on the Library, and Secretary of the Society, the writer has had constant occasion to visit Horticultural Hall. He has had perhaps, from this cause, a better opportunity to notice the condition of your property and the fidelity with which it is guarded, than most of you whose presence is all too infrequent. Remembering vividly the reckless waste in the early stages of the war, when the rafters served for kindling-wood and sawdust spittoons received half-burnt cigars; retaining an equally keen perception of the omnipresent

foulness that offended eye and nostril alike during the later tenancy of the *Saints;* he feels thoroughly qualified to attest and appreciate the admirable order, cleanliness, and good taste, which greet him at every turn. You are to be congratulated upon having secured the services of Mr. John C. Newton as custodian of your property. His report has disclosed to you the unprecedented prosperity of your finances, notwithstanding the pressure of extreme and rare claims and liabilities. But his report will not reveal to you the assiduity with which he has watched over your interests; personally doing labor that most persons would have hired; performing repairs of every mechanical kind with his own hands, to save demands upon your limited treasury; and imperilling health if not life, in hours of storm and sleet, upon that roof which, whether originally built or subsequently reconstructed, has been the fertile source of financial woe. Nor have such exertions been fruitless. Our Hall, which had become a by-word and reproach; a common resort of the dissolute and impure, and therefore to be shunned by the decent; is reinstated in public esteem and grows more popular as each day elapses. Its value increases with its good name, each re-acting upon and enhancing the other. This tribute which to some of you may appear extravagant, is tendered in these precise terms, because the writer is thoroughly familiar with the facts, and considers it simple justice that they should be as well known to the whole Society.

The Committee on the Library were instructed by the Trustees, in pursuance of a suggestion by the Secretary in his Annual Report then submitted, to procure a portrait of the late JOHN MILTON EARLE. Nothing more was originally contemplated than a good and durable likeness. But deliberate reflection upon his individual merits, and due consideration of the fact that it might tend to the ultimate creation of a pictured gallery of Horticultural worthies, induced the Committee to believe that they should best discharge their duty by procuring an oil painting of their lamented associate. Accordingly a contract was made with Mr. J. S. Lincoln of Providence, R. I., an artist of deserved celebrity, and perhaps as noted for the skill with which he revives the lineaments of the dead as for felicity in limning the living countenance; the result of whose labors is before you. The Committee are thoroughly pleased with the painting, as a likeness and a work of art, and doubt not that the Society will share in their satisfaction. It is hoped however, that this will prove but the first step towards the procurement of portraits of all our benefactors, whether deceased or happily spared to us. The benignant features of DANIEL WALDO and JOHN GREEN; of GEORGE

JAQUES and JOHN C. RIPLEY; of FREDERIC WM. PAINE and SAMUEL H. COLTON; should be conspicuous upon these walls. SALISBURY and LINCOLN, (D. WALDO;) BULLOCK and DEWEY; HILL and RICHARDSON; FRANCIS and HADWEN: long may it be ere their title to precedence shall be based upon the fact of their absence from our midst! We can offer them no substantial remuneration for official fidelity or zeal in our service. But the least that we ought to do, and it is little enough, is to procure their portraits for these Halls; that, from a study of them, our successors may be enabled to form some idea of how they looked to whom it is, and will continue to be chiefly due, that the WORCESTER COUNTY HORTICULTURAL SOCIETY fell heir to a goodly heritage.

The Blight, so fatal to the Pear, has been unusually destructive within the past year. Complaint of its ravages is heard from all sections of the Republic. Here a vigorous leader, there small branches and short twigs throughout the entire top, gave unmistakable token of the malign influence. Particular varieties seem peculiarly susceptible, while at their worst estate not communicating the infection. The writer has utterly lost the Glou Morceau, but the Josephine de Malines, upon the very same stock, appeared in perfect health. The Bartlett remains unaffected, but the new Beurre de l' Assomption, engrafted upon it perished to the last scion. The Washington thrives luxuriantly, although every branch of the Belle Lucrative has to be amputated. And the Belle Lucrative has withered, root and trunk in a night, leaving the Souvenir du Congrés high in the air, after three years of vigorous growth, thrifty, but of course doomed. Among the causes of this Blight, over-stimulation by an excessive application of fertilizers, especially stable manure is assigned by some. Yet, in the observation of your Secretary, trees growing in grass have suffered equally with others which, situated in the heart of Raspberry plantations, were compelled to partake of the rich nutriment so indispensable in the culture of that exquisite fruit. Has any one seen harm come to the Louise Bonne de Jersey, no matter how heavily manured? Does the Seckel ever manifest a symptom of Blight? There is a Pear Orchard upon Mill Street, in this city, if the owner will pardon the allusion, in which the omnipresence of Blight was equally conspicuous with the absolute innocence of manure. Sudden atmospheric changes, (notably thunderstorms,) have also been charged with the developement, if not production of this disease. But, whatever may have been alleged, heretofore, with greater or less plausibility, it is noteworthy that the Blight, which raged virulently during the vernal months of 1875, received a decided, if not absolute check, after the intense electrical disturbances

that ushered in and attended the early summer. Be the cause what it may, let us hope that it will not always elude human research, and that the discovery of a sure remedy may be speedily announced and approved. Quite recently a note of alarm has been sounded from the extensive Apple Orchards of western New York. Possibly the *Pyrus Communis* * might be sadly relinquished. But can we bring ourselves to spare, upon any terms, that noblest of all fruits, indigenous to the temperate zone, *Pyrus malus*.†

In this connection, while treating of the mortality among old or new varieties, brief reference may be permitted to one species, whose advent was loudly heralded in England, and which some of your members have endeavored, at no slight pecuniary cost and not with the most flattering success, to naturalize here. M. Charles Baltet, writing in the *Bulletin d'Arboriculture*, states that the habit, the wood, the leaves, and the buds, of the specimens of Brockworth Park he has been supplied with, announce it to be the same as Bonne d'Ezée. And higher authority, there is none. The imposition however, if such, is not without precedent.††

In the oldest of our Horticultural Magazines, one in which the vigor of youth appears of late to be renewed, occur the following passages : – "It has been advanced, and not without reason, that the majority of our premium lists are composed to suit the collections of the wealthy, whilst militating against the poor man's mite." "Our remarks are intended to apply more especially to the wholesale manner of offering premiums for

* Pear. † Apple.

[††Since the above was written, a note has appeared in the London *Garden* from the famous orchardist Mr. J. Scott of Merriott, wherein he says :—

"As one of the results of this examination, (of his apples and pears,) I have, like others, found that the pear miscalled Brockworth Park, is no other than one of my greatest favorites, viz: Bonne d' Ezée. The Brockworth is from trees bought in Gloucestershire. The other, (Bonne d' Ezée), is from trees obtained from France."

"I do not know how far a man is justified in sending out trees as new, when he cannot vouch for their being so." * * * * * * * *

"Let me also direct the attention of your readers to the respective descriptions of the two Pears, as given by the Pomological Director of the Royal Horticultural Society. Bonne d' Ezée is thus described: 'Flesh white, coarse-grained, inclining to gritty, half-melting and juicy, with an agreeable perfume ;' and it is added : 'This is only a second-rate Pear, the texture of the flesh being coarse.' The same authority describes Brockworth Park thus :— 'Flesh, white, delicate, buttery and melting ; very juicy, rich and various ; and the Royal Horticultural Society gave it a first class certificate in 1871.' "

"What reliance, therefore, can be placed upon such descriptions ? Bonne d' Ezée is certainly deserving of all that is said of the Brockworth, and more ; for it is without doubt one of our best September and October Pears, and attains, under favorable circumstances, a large size."

From this it will be seen that, although money has been expended for Brockworth Park, under a delusion, it may not be wholly lost. Yet the experience is somewhat costly, and, like those burnt children who dread fire, our more enterprising members will be less eager, in future, to invest five dollars upon a false Pomological pretense. Additions to the list of "September and October Pears" are not so imperatively needed as to justify great extravagance in their purchase. Upon a pinch we might content ourselves with Clapp's Favorite; Bartlett; Louise Bonne de Jersey; Doyenne du Comice; St. Ghislain ; and Beurre Superfin.—E. W. L.]

collections, rather than special articles embraced therein." "For instance, in place of offering a large purse for the largest and best collection of greenhouse plants, let the amount designated be distributed among the plants that usually go to make up the collections." And, as of greenhouse plants so, by parity of reason, is the argument applicable to all the genera of fruits and vegetables.

The members of this Society can afford to regard such suggestions from high authority with a reasonable degree of complacency. There is no one step therein advised, that was not long since taken, at the urgency of your Secretary, or upon the prompting of your own clear perception of its imperative necessity. For years have the number of classes been steadily reduced. In 1874 there were but two classifications of Pears, the genus to which our Pomologists have heretofore devoted most and perhaps undue attention. In his Annual Report of that year, reviewing the salient defects of the Autumnal Exhibition, your Secretary employed the following language: "At that Exhibition, room was assigned to three hun-"dred and seventy-six (376) plates, containing three thousand nine hun-"dred and forty (3940) Apples and Pears, which were inferior to others of "their kind upon the tables, and whose simple exclusion would not only "have involved a proper saving of expense, but also a downright economy "of labor. Room must be gained in some way. In what manner more "effectually, or to greater satisfaction, than by the abolition of every "remnant of an obnoxious system, which has no other recommendation "but that of antiquity! It was well enough a generation since to avail "ourselves of the experience of the Massachusetts Society. But we are "now taught by a lifetime of personal observation, and have no excuse "for disregard of its admonitions.

"The evil is as apparent in the Vegetable department, which justly "demands so much of your attention, and which, within a few years, has "been raised to a position of signal eminence. Competent judges ex-"pressed the opinion that a better display of Vegetables was never seen "in Massachusetts than that which struggled for exhibition last October in "the Hall of CERES. And yet there too were great collections—mere "numerical aggregates of species, of every one of which superior speci-"mens were shown by the same contributors in their single lots No man "who proposes to contest the palm of excellence for Corn, Squashes or "Potatoes will risk his chances by merging his best samples in a general "collection, any more than he would imperil his whole hopes by first ex-"hibiting his productions, blighting their freshness, at the poor old Hippo-"drome. All "general collections" in the Vegetable Department are as

"meaningless (while they are even more cumbersome) as they have been "found among the Fruits. Your Secretary has no hesitation therefore, in "advising that all general collections, whether of Apples, Pears or Veget-"ables, be abolished. That the sum thereby saved be applied to the "greater encouragement of the several species in the various Genera of "Field and Garden products. That quality be our sole aim, at the expense "of quantity or specific gravity—this latter with due deference to the "Committee on Pears. That, for example, three mangolds be accepted as "evidence that a cartload just like them could have been piled up, to the "annoyance of every one."

The action of the Trustees was as decisive as it has ever been when their judgment was convinced. Scarcely a class was retained in the Schedule of Premiums for the year just closed; and then only among Plants and Vegetables, within which departments it is questionable if the reform might not as well be made radical. What was the result? At the Annual Autumnal Exhibition there were the following entries:

Apples:	Contributors,	33;	Plates,	165;	Specimens,	1650.
Pears:	"	71	"	356	"	4272.
Vegetables:	"	35;	Articles,	321;		

in lots varying from the half-peck of Onions or Potatoes, to detachments of the by no means infinitesimal Pumpkins or Squashes. Now, while it must be admitted that our tables have been cumbered in former years with a mass of articles as difficult to judge, or even examine, as it was profitless to attempt either; yet it cannot be disputed that our claim to the achievement of superior excellence in 1875 is well founded. The selection of Apples was limited by its being the off year, so-called, supplying therefore a very limited crop from which to cull specimens.* Of the quality of those which were exhibited, the Report of the able and pains-taking Chairman may be trusted to speak with candor. The Pear, as a whole, must be conceded to have surpassed any previous display within our Hall, as they certainly far exceeded expectations based upon the ravages of Blight and the general complaint of harm from noxious insects. Of unblemished aspect and goodly form, their like, in these respects, has doubtless been seen by us upon other occasions. But, in the matter of size, the specimens transcended all past experience. This was notably the case with the smaller varieties, as the Seckel and St. Ghislain, which can perhaps afford to gain in bulk without losing

*Note.—Our worthy and observant associate, Mr. Newell Wood of Millbury, mentions a curious example of good resulting from evil. An orchard from which the buds had been stripped by the Canker-Worm, in 1874, yielded a plentiful crop of excellent Apples in 1875. But shall we encourage the Canker-Worm, even to transpose the year of abundance?—E. W. L.

any of their surpassing flavor. It was also noticeable that the Flemish Beauty reappeared in more than pristine magnitude and soundness; while the display of Beurre Diel and White Doyenné tended to encourage the new-born hope of a resuscitation of those superior varieties.

The Vegetables were enough for the Hall of *Ceres*, whose cornucopia has there found congenial and permanent lodgement. Had the season been propitious for a later fruition of Tomatoes, no space would have appeared vacant. As it was, with an arrangement slightly altered and improved, the exhibition of Vegetables, confined rigidly to specialties for the first time, would have puzzled the judges and bewildered the observer. In point of fact, the purpose of the Trustees in this, as in the other departments, was crowned with substantial success. The Cabbage, the Onion, and the Watermelon were no longer pitted against the Beet, the Musk-melon and the Squash, in unnatural rivalry. The Lima Bean—good for six days in the week; and the Pea, or Navy Bean, edible upon Sunday; might hold high carnival by themselves. But they could no longer challenge all comers, running a muck as it were; or "standing up to be counted," as in a late political example, where the enumeration consumed no time and the enumerated were not legion. Individual exhibitors may have failed of anticipated success, but the experiment itself was vindicated.

Yet, after all, claiming that the display in every department was of exceeding excellence, and better and greater than the Trustees were warranted in expecting as the result of such a radical change in practice; the question recurs to your Secretary, which has thrust itself upon his mind repeatedly of late years, nor will "down at his bidding,"—Can the Worcester County Horticultural Society propose to itself no loftier aim,—attain no greater achievement than that which would seem to be the object of our successive political contests? Which of these Cabbage-heads is the thickest,—of these Onions, the most fragrant and savory? The *Horticulturist*, in its preface to the remarks heretofore recited, thus introduces the subject:— "It has long been a disputed point whether discussional meetings, or exhibitions of Horticultural productions, were the more useful in disseminating knowledge that would assist in raising the science, or practice rather, if the latter term is preferred, to a higher standard." And sums up its judgement in favor of the system of exhibitions because of their general popularity. But is this conclusion sound? Subtract the major premise and of what value is the conclusion? So far as the experience of this Society extends, there can be no doubt that public interest in a general Autumnal Exhibition has, for many years past,

steadily and surely waned. And the latest was also the most signal illustration of this fact. Unquestionably, this result is brought about by many independent causes. The ranks of contributors are recruited, but slowly ; and their number is restricted each year more closely to those in the immediate vicinity of the city of Worcester. The Agricultural Society, which voted, long ago, upon motion by D. WALDO LINCOLN and its second by O. B. HADWEN to relinquish an unprofitable rivalry, has, without a repeal of that vote, resumed its heterogeneous shows of third-rate Fruits and Flowers. And, although no useful purpose is thereby subserved, the attention of the community is distracted by a demand for its patronage, that is none the less pertinacious because wholly without merit. Adjoining towns bestir themselves vigorously in behalf of their local exhibitions ; striving to attract the support of the city which they reproach with appropriating to itself the control of this Society, in apparent oblivion of the fact that it had been first deserted or abandoned by themselves. The newspaper press, that never fails to take gratuitous and full note of the pettiest side show in the County, affects to ignore the finest Horticultural display ever made in Worcester. These, and similar, are the buffets that we have to meet and repel.

What then should be the future policy of the Society ? Your Secretary, after serious and mature reflection, hesitates not to advise a discontinuance, at least temporarily, of the Annual Autumnal Exhibition. If people are tired of an elegant Floral display, withhold it from their wearied vision. If they are careless, or indifferent to the practical test of Peach, Plum, or Grape culture, among us, there is no law compelling us to interrupt their musical frenzies, or prevent their mild, mental dissipation in the evening lecture. We are incorporated to "advance the science and encourage and improve the practice of Horticulture." It is not our privilege to indulge in the retrospect of a century spent in this our favorite pursuit or recreation. But, without undue boasting, this Society can point to the developement of Fruit and Flower, of Plant and Shrub, in Urban garden and Rural door-yard, claiming it as, in large measure, the outgrowth of its instruction, the matured and precious results of tuition by example. Accepting with gratitude and respect the kindly compliments and condescending pats-on-the-back of those who are our seniors in the field, it is nevertheless our right to assert that all the praise bestowed upon us has been unquestionably and worthily earned.

Should it be your decision, through your Trustees, to discontinue the Annual Autumnal Exhibitions, you can still reserve the benefit and pleasure of the weekly meetings in this Hall of Flora. At our last general

display you took the trouble, (and it was not slight,) to select and bring to our Hall of Pomona, sixteen hundred and fifty (1650) Apples, and four thousand two hundred and seventy-two (4272) Pears. Relieving yourselves of this constantly recurring effort, zealous as you are to undertake it, in the interest of Horticulture and of the Society, you would be free to perfect those limited exhibitions, which are perhaps of as much utility because not too extended for comprehension, or inspection at a glance. With a more generous appropriation, in such a case easily spared, you could extend liberal encouragement to displays of particular Flowers and Fruits whose wide dissemination may appear desirable. The Hyacinth in spring ; the Gladiolus and Aster in Autumn ; and the Grape, Peach, Plum and Quince in their respective seasons. Supplying a pecuniary stimulus, where it is needed ; you can also withhold it in those Pomological or Floral genera wherein it is no longer required.

Should the discontinuance of our Annual Autumnal Exhibition, if only for a time, tend to a reduction of our very considerable debt, in that fact alone might be found a justification of the proposed policy. Thereafter—upon a resumption of those General Exhibitions, should you conclude to resume them, it is to be hoped that admission to them will be as free as the air. At that time,—near or remote,—let us cease attempting to make merchandise of our knowledge, or experience ; but throw our doors wide open to all who can be induced to enter. Our Legacies and Benefactions were not given to us to be multiplied by discount, but rather as a *Trust*, to be managed for the best interest of the community. Let Bucolism speculate, if it prefer, upon the vulgar appetite for coarse excitement ; and exact its penny for the monstrosities of the side-show and the knaveries of the track. But be it our higher election to go out into the by-ways and lanes, and, finding those who are blind and halt in the pleasant ways of Horticulture, compel them to come in. So shall we best fulfil the disinterested aim of the founders of our Society. In this way, and this only, can we answer the demands of the times, in prompt recognition of the changes in popular taste and requirement. And, at one and the same time discharge our inexorable duty whereby we are bound, in all honor, to "Advance the Science and encourage and improve the Practice of Horticulture."

All which is respectfully submitted by

EDWARD WINSLOW LINCOLN,
Secretary.

HALL OF FLORA,
Worcester, Mass., Nov. 3, A. D. 1875.

BY-LAWS

OF THE

Worcester County Horticultural Society.

ANNUAL MEETING.

ARTICLE 1. There shall be an Annual Meeting of the Society, to be held on the first Wednesday in November of each year.

MEMBERSHIP.

ARTICLE 2. Any male person may become a Member of the Society on payment of the sum of Five Dollars; females upon the payment of Three Dollars. Honorary Members may be admitted by vote of the Society or of the Trustees, but shall not have the right to vote at any Business Meeting.

OFFICERS.

ARTICLE 3. The Officers of the Society shall consist of a President, three (3) Vice-Presidents, a Secretary and Librarian, and a Treasurer—(all of whom shall be Trustees *ex-officiis*)—and the Trustees *by election*. The Officers are to be elected by ballot, to hold their offices until the next annual election, or until others are chosen in their places, and to discharge the duties of their respective offices.

MEETINGS OF THE SOCIETY.

ARTICLE 4. All meetings of the Society shall be called by giving not less than one (1) week's notice in at least one newspaper published in the City of Worcester. Special Meetings of the Society shall be called at any time, on the application of five (5) members therefor. And at all meetings of the Society, seven (7) shall constitute a quorum for the transaction of business.

SECRETARY.

ARTICLE 5. HIS DUTIES: The Secretary shall keep records of all business transacted at the meetings of the Society and of the Trustees, and also of the admission of Members, and he shall call and notify meetings of the Society and of the Trustees, and shall notify persons chosen to office in the Society of their election and the Committees of their appointment, and shall attend to the correspondence of the Society.

TREASURER.

ARTICLE 6. HIS DUTIES: The Treasurer shall, at each Annual Meeting of the Society, make a Report of his Receipts and expenditures on account of the Society, and the condition of its finances, and exhibit his accounts. And a Committee shall be annually appointed by the Trustees to examine and audit his accounts and to report thereon. The Treasurer shall give bonds to the acceptance of the Trustees of the Society for the faithful discharge of the duties of his office.

TRUSTEES.

ARTICLE 7. THEIR NUMBER: The Trustees shall consist of any number not less than twenty-five (25) exclusive of the officers, who are Trustees *ex-officiis*—and the exact number of Trustees for the year ensuing, shall be determined at each Annual Meeting.

THEIR POWERS: The Trustees shall have the general charge and direction of the affairs and business of the Society, its funds and property, so far as not otherwise provided for in the By-Laws or at the meetings of the Society; and may appoint one or more exhibitions of Flowers, Fruit or Vegetables in each year, and make all arrangements therefor and for conducting the same, including the appointment of Committees; and may establish Premiums and provide for awarding the same, and shall direct the disposal of all articles of a vegetable growth which may be presented to the Society, including the distribution of Seeds, Scions and Cuttings, Layers and Roots.

THEIR MEETINGS—QUORUM: At all meetings of the Trustees seven (7) shall constitute a quorum for the transaction of business; and a meeting of the Trustees may at any time be called, on the application of three (3) members of the Board to the President of the Society; and all meetings of the Trustees shall be called by the Secretary. There shall be stated meetings of the Trustees, to be held once in three (3) months.

FINANCE COMMITTEE.

ARTICLE 8. There shall be chosen at the Annual Meeting of the Society a Committee of three (3), one member thereof to be elected each and every year, to hold office for the term of three years ; said Committee, subject to the control and supervision of the Trustees, shall have the general care and oversight of the lands, buildings and other property of the Society ; shall approve all bills against the Treasury before being paid by the Treasurer, except money awarded for Premiums, and shall authorize the Treasurer to invest, for the benefit of the Society, in one or more of the Savings Banks of the City of Worcester, any money not appropriated or necessary for the current expenses of the Society.

AMENDMENTS.

ARTICLE 9. The By-Laws may be altered or amended at the Annual Meeting of the Society, by a vote of two-thirds ($\frac{2}{3}$) of the members present ; provided, that previous notice shall have been given in the call for the Annual Meeting that the subject of an alteration of the By-Laws is to come before the Society at that meeting.

OBITUARY.

BY PRESIDENT O. B. HADWEN, NOV. 3, A. D. 1875.

Since the last Annual Meeting of this Society, one of its prominent and valued members has been removed by death.

I allude to SAMUEL H. COLTON, who died at Chicago, Illinois, on the 13th of September last, whither he went as a delegate from this Society to attend the American Pomological Convention assembled in that City.

Mr. Colton had long been interested and engaged in Horticultural pursuits, being one of the oldest members of this Society, and for many years active and efficient on the Board of Trustees, until the Society elected him for their Treasurer.

He excelled in the cultivation of the Apple and Pear, introducing many new and valuable varieties; and he became remarkably well versed in the knowledge of these fruits. He was always interesting and instructive in discussing their merits, and has been largely instrumental in disseminating both fruit and ornamental trees throughout the county. His appreciative mind and fine taste afforded him great capacity for the enjoyment of ornamental trees and plants; and the grounds about his residence were abundantly and highly embellished with the choicest collection.

Few men possess, as he did, the qualities that constitute the model gentleman. Modest, reserved and unpretending, yet social and genial; always ready to impart in an easy and intelligent way his rare fund of knowledge acquired by extensive reading and travel.

His intercourse with men was marked by courtesy of manner, indicative of kindness and respect, and he died, as he had lived, respected and beloved.

OFFICERS AND COMMITTEES
OF THE
Worcester County Horticultural Society,
FOR THE YEAR 1876.

PRESIDENT.

WILLIAM T. MERRIFIELD, of Worcester.

VICE PRESIDENTS.

STEPHEN SALISBURY, of Worcester; PHILIP L. MOEN, of Worcester; O. B. HADWEN, of Worcester.

SECRETARY.

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER.

JOHN CALVIN NEWTON of Worcester.

TRUSTEES (BY ELECTION).

George W. Richardson,	Worcester	Alexander H. Bullock,	Worcester
Isaac Davis,	"	D. Waldo Lincoln,	"
George E. Francis,	"	Edward Earle,	"
James F. Allen,	"	Henry Phelps,	"
Henry Woodward,	"	Nathaniel Paine,	"
Charles Richardson,	"	Thomas A. Dawson,	"
William T. Harlow,	"	J. Henry Hill,	"
Edwin Conant,	"	James Draper,	"
Samuel A. Knox,	"	Henry L. Parker,	"
Francis H. Dewey,	"	William H. Earle,	"
Stephen Salisbury, Jr.,	"	William W. Cook,	"
Samuel Flagg,	"	Calvin L. Hartshorn,	"
Horatio Phelps,	"	Paul Whitin,	Whitinsville
Stephen S. Foster,	"	George Cruickshanks,	"
Thomas M. Lamb,	"	Jonathan Forbush,	Bolton
Frank J. Kinney,	"	Newell Wood,	Millbury
Alfred Davis,	"	F. M. Marble,	Grafton
Emory Banister.	"	Jos. C. Lovell,	West Boylston

STANDING COMMITTEES.

ON FINANCE.

O. B. Hadwen, Stephen Salisbury, Jr. James Draper.

ON LIBRARY AND PUBLICATION.

Edward W. Lincoln, George E. Francis, William T. Harlow.

ON NOMENCLATURE.

James F. Allen, Henry Phelps, George E. Francis, O. B. Hadwen, Joseph C. Lovell

ON ARRANGEMENTS AND EXHIBITIONS.

J. C. Newton, *Chairman*, Samuel Flagg, Alfred Davis,
George E. Francis, James Draper, William T. Merrifield, *Pres.*
O. B. Hadwen, Henry Phelps, Edward W. Lincoln, *Sec'y*,
Nos. 5 Oak and 18 Front Streets.

☞ The AUTUMNAL EXHIBITION will open at 6 o'clock, P. M., on Wednesday, September 20th, and close on Friday, September 22d, at 9 o'clock, P. M.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

Horticultural Society,

FOR THE YEAR 1876.

☞ The attention of Exhibiters is particularly called to the Rules and Regulations, General and Special.

WORCESTER, MASS.:
EDWARD R. FISKE, PRINTER.
1876.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

JOHN C. NEWTON, *Chairman.*
GEORGE E. FRANCIS,
SAMUEL FLAGG,
JAMES DRAPER,
HENRY PHELPS,
ALFRED DAVIS.
O. B. HADWEN.

WM. T. MERRIFIELD, *President.*

EDWARD W. LINCOLN, *Secretary*, Nos. 5 Oak and 18 Front Streets, Worcester.

The Autumnal Exhibition commences on Wednesday, September 20th, at 6 P. M., and closes on Friday, September 22d, at 9 P. M.

COMMITTEES OF AWARD.

APPLES.—WILLIAM T. HARLOW, *Chairman;* James F. Allen, Samuel A. Knox, Rufus Woodward, of *Worcester;* and John L. Brown, of *Lunenburg.*

GRAPES, PEACHES, &c.—WILLIAM H. EARLE, *Chairman;* T. M. Lamb, Charles Goodwin, of *Worcester;* George Cruickshanks, of *Whitinsville;* and F. M. Marble, of *Grafton.*

PEARS.—HENRY L. PARKER, *Chairman;* Henry Phelps, John C. Newton, James Draper, of *Worcester;* and Newell Wood, of *Millbury.*

PLANTS, FLOWERS, &c.—SAMUEL FLAGG, *Chairman;* George E. Francis, Clarendon Harris, D. S. Messinger, and Henry L. Shumway, of *Worcester.*

VEGETABLES.—ALEXANDER MARSH, *Chairman;* Thomas R. Norcross, J. D. Lovell, Charles Belcher, and Wm. H. Hackett, of *Worcester.*

☞The Committees will meet at 7 o'clock on the evening of Wednesday, September 20th, being the opening evening of the Exhibition, to determine the awards.

SUMMER EXHIBITIONS.

By vote of the Trustees there will be Two General Exhibitions, in the Summer of 1876, whose precise dates will be determined by the nature of the season. These Exhibitions will open at 3 o'clock P. M., and close at 9:30 o'clock P. M. Admission will be without charge.

ROSES, FLOWERS, PLANTS, AND STRAWBERRIES.

The Annual Exhibition of Roses, Cut Flowers, Green House Plants, and Strawberries, will be held in the Hall of Flora, between the hours named above.

All articles for competition must be entered with the Secretary, and be placed on the tables, before 1 o'clock, P. M.

SPECIAL NOTICE :

The Rules and Regulations require that correct and legible names shall be attached to each and every plant or flower entered in a class of named varieties ; and that written lists of the same shall be given to the Secretary.

Strict compliance with the Rules and Regulations, to be found on pages 9 and 10, is required on the part of Contributors and Committees.

PREMIUMS.

GARDEN ROSES.

For the best general display of named varieties	$ 8 00
For the second best	5 00
For the third best	3 00
For the best arranged vase	3 00
For the second best	2 00
For the third best	1 00

CUT FLOWERS.

For the best collection	$ 5 00
For the second best	3 00
For the third best	2 00

GREEN HOUSE PLANTS.

For the best collection of named specimens	$ 8 00
For the second best	6 00
For the third best	4 00

PANSIES.

For the best stand	$ 2 00
For the second best stand	1 00

STRAWBERRIES.

No person can compete for more than one premium with the same species of Berry or varieties of Fruit. All *Small Fruits* must be displayed in quart boxes.

PREMIUMS.

For the best quart of Agriculturist	$ 2 00
For the second best quart of Agriculturist	1 00
For the third best quart of Agriculturist	50
For the best quart of Boyden No. 30	1 00
For the best quart of Charles Downing	2 00
For the second best quart of Charles Downing	1 00
For the third best quart of Charles Downing	50
For the best quart of Col. Cheney	2 00
For the second best quart of Col. Cheney	1 00
For the best quart of Downer's Prolific	1 00
For the best quart of Ida	1 00
For the best quart of Jucunda	2 00
For the second best quart of Jucunda	1 00
For the third best quart of Jucunda	50
For the best quart of Kentucky	2 00
For the second best quart of Kentucky	1 00
For the third best quart of Kentucky	50

For the best quart of Lady of the Lake	$ 1 00
For the best quart of Matilda	1 00
For the best quart of President Wilder	1 00
For the best quart of Lennig's White	1 00
For the best quart of Triomphe de Gand	2 00
For the second best quart of Triomphe de Gand	1 00
For the third best quart of Triomphe de Gand	50
For the best quart of Wilson	2 00
For the second best quart of Wilson	1 00
For the third best quart of Wilson	50
For the best quart of any other variety	1 00

CHERRIES.

For the best two quarts of Black Tartarian	2 00
For the second best two quarts of Black Tartarian	1 00
For the best two quarts of any other named Black variety	1 00
For the best two quarts of any named White variety	2 00
For the second best two quarts of any named White variety	1 00

The Second Summer Exhibition will be held at a suitable time, during the month of August, under similar Rules and between the same hours as the first.

The Premiums will be,—

FLORAL:

PROFESSIONAL.

For the best two stands of Cut Flowers, from Professional Florists	$ 5 00
For the second best two stands of Cut Flowers, "	3 00
For the third best two stands of Cut Flowers, "	2 00

AMATEUR.

For the best stand of Cut Flowers, from Amateur Florists	$ 5 00
For the second best stand of Cut Flower, "	4 00
For the third best stand of Cut Flowers, "	3 00

For the fourth best stand of Cut Flowers from Amateur Florists...$ 2 00
For the fifth best stand of Cut Flowers, " ... 1 00

Taste in arrangement will be considered, as well as superiority of specimens, in the award of all Floral Premiums.

POMOLOGICAL.

CURRANTS.

For the best two quarts of La Versaillaise.....$ 2 00
For the best one quart of La Versaillaise..... 1 00
For the best quart of Red Dutch..... 1 00
For the second best quart of Red Dutch..... 50
For the best quart of Dana's Transparent..... 1 00
For the best quart of White Gondouin..... 1 00
For the best two quarts of White Grape..... 2 00
For the best one quart of White Grape..... 1 00

RASPBERRIES.

For the best two quarts each of three named varieties.....$ 3 00
For the best two quarts of Brinckle's Orange..... 2 00
For the second best two quarts of Brinckle's Orange..... 1 00
For the best two quarts of Northumberland..... 2 00
For the second best two quarts of Northumberland..... 1 00
For the best two quarts of Hudson River Antwerp..... 2 00
For the second best two quarts of Hudson River Antwerp.... 1 00
For the best quart of Clarke..... 1 00
For the best quart of Franconia..... 1 00
For the best quart of Hornet..... 1 00
For the best quart of Knevett's Giant..... 1 00
For the best quart of Philadelphia..... 1 00

BLACK CAPS.

For the best two quarts of any named variety..... 2 00
For the second best " " 1 00

BLACKBERRIES.

For the best quart of Wilson..... 1 00
For the best quart of Kittatinny..... 1 00
For the best quart of Wachusett..... 1 00

APPLES.

For the best ten specimens of any named variety	2 00
For the second best ten specimens of any named variety	1 00

PEARS.

For the best twelve specimens of Beurre Giffard	$ 2 00
For the second best	1 00
For the best twelve specimens of Doyenne d 'Eté	1 00
For the best twelve of any other named variety	1 00

TOMATOES.

For the best twelve specimens (open culture)	2 00
For the second best twelve specimens (open culture)	1 00

At these Summer Exhibitions the Standing Committee on Flowers, Plants, &c., &c., will serve.

The Committee on Fruits, &c., &c., will consist of Messrs. Henry Phelps, James Draper, John C. Newton, George Cruickshanks, of *Whitinsville*, and the Secretary.

In order to afford the Committees an opportunity to examine and report on the articles exhibited, no other person can be admitted to, or remain in the Hall, between the hours of one (1) and three (3) o'clock on the days of the Exhibitions.

AUTUMNAL EXHIBITION.

THE SOCIETY will hold its ANNUAL AUTUMNAL EXHIBITION, A. D. 1876, in its own Halls, on Front Street, in the City of Worcester.

The Exhibition will commence on Wednesday, September 20th, at 6 o'clock P. M., and close on Friday, September 22d, at 9 o'clock P. M.

☞ Exhibitors are notified that strict conformity to the Regulations and Rules will be expected and required, for their own benefit as well as for the convenience of the Officers of the Society.

☞ Particular attention is called to the Rules and Regulations on pp. 9 and 10, and especially to Nos. 1 and 17, respectively; the one defining the limit of time for entries of Vegetables, and the other requiring lists of all entries to be filed with the Secretary.

RULES AND REGULATIONS:

1. Articles offered for premium at the AUTUMNAL EXHIBITON must be in the Halls and entered with the Secretary before six (6) o'clock P. M., of the opening day of the Exhibition; *Provided*, that all entries of Vegetables for the Exhibition must be made with the Secretary *before* 6 o'clock P. M., on the 16th day of September.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester.*

3. After the articles are arranged they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove* them, until the Exhibition is closed, when they will be delivered as the contributors may direct.

4. No person shall be entitled to receive more than one premium for the same specimen, and no article for which a premium has been once awarded can receive another during the season.

5. No cards of a business nature will be allowed in any Exhibition.

6. Where a certain number or quantity of Plants, Flowers, Fruits, or Vegetables, is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

7. It will be the duty of the Committees to *exclude from exhibition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste.

8. The Committee have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary, by giving seasonable notice thereof.

9. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names.

10. No Flowers, Plants, Fruits or Vegetables will be entitled to a premium unless they possess points of superiority; and the Committees are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them.

11. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens for trial and examination, if requested.

12. No member of any of the Committees for awarding premiums or gratuities shall, in any case, vote or decide respecting an award for which such member may be a competitor, or therein have an interest; but in such case such member shall temporarily vacate his place upon the Committee, the vacancy for the time being to be supplied by the remaining members of the Committee.

13. All premiums that are not claimed within three months after the Autumnal Exhibition shall be forfeited to the Society.

14. The awards of the premiums will be made known as soon as the premium cards can be filled out and placed upon the tables.

15. Admission to the Autumnal Exhibition, for those who are not members of the Society, 15 cents; children under sixteen years of age, 10 cents; packages of five (5) tickets, 50 cents.

16. At the close of the Exhibition the Fruit, Vegetables, etc., belonging to the Society will be sold, and all specimens which are not claimed at that time will be considered as given to the Society, and will be sold for its benefit.

17. *Contributors will be required to furnish the Secretary with a list of their articles, specifying the precise Class in which they would compete.*

18. "Downing's Fruits of America," revised edition, will guide the Committees in their decisions upon matters at issue.

☞ SPECIAL NOTICE.—The several Committees will meet at 7 o'clock P. M., on the opening evening of the Exhibition, to make their awards.

PREMIUMS.

AUTUMNAL EXHIBITION.

APPLES.

COMMITTEE.—Wm. T. Harlow, *Chairman;* James F. Allen, Rufus Woodward, Samuel A. Knox, of *Worcester;* and John L. Brown, of *Lunenburg.*

☞ The Committee will meet at 7 o'clock on the evening of Wednesday, September 20th, being the opening evening of the Exhibition, to determine the awards.

For the best ten Astrachan (Red)	$ 2 00
For the second best	1 50
For the third best	1 00
For the best ten Baldwin	2 00
For the second best	1 50
For the third best	1 00
For the best ten Cogswell	2 00
For the second best	1 50
For the third best	1 00
For the best ten Duchess of Oldenburg	2 00
For the second best	1 50
For the third best	1 00
For the best ten Golden Sweet	2 00
For the second best	1 50
For the third best	1 00

For the best ten Gravenstein	$ 2 00
For the second best	1 50
For the third best	1 00
For the best ten Holden Pippin	2 00
For the second best	1 50
For the third best	1 00
For the best ten Hubbardston Nonesuch	2 00
For the second best	1 50
For the third best	1 00
For the best ten Leicester Sweet	2 00
For the second best	1 50
For the third best	1 00
For the best ten Lyscom	2 00
For the second best	1 50
For the third best	1 00
For the best ten Maiden's Blush	2 00
For the second best	1 50
For the third best	1 00
For the best ten McClellan	2 00
For the second best	1 00
For the best ten Mother	2 00
For the second best	1 50
For the third best	1 00
For the best ten Northern Spy	2 00
For the second best	1 50
For the third best	1 00
For the best ten Peck's Pleasant	2 00
For the second best	1 50
For the third best	1 00
For the best ten Porter	2 00
For the second best	1 50
For the third best	1 00
For the best ten Rhode Island Greening	2 00
For the second best	1 50
For the third best	1 00
For the best ten Roxbury Russett	2 00
For the second best	1 50
For the third best	1 00
For the best ten Sweet Bough (Early)	2 00
For the second best	1 50
For the third best	1 00

For the best ten Tallman's Sweet.....$ 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Twenty Ounce..... 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Washington Royal..... 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Washington Strawberry..... 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Williams' Early Red..... 2 00
For the second best..... 1 50
For the third best..... 1 00

GRAPES, PEACHES, &C.

COMMITTEE.—William H. Earle, *Chairman;* Thomas M. Lamb, Chas. Goodwin, of *Worcester;* George Cruickshanks, of *Whitinsville;* and F. M. Marble, of *Grafton.*

☞ The Committee will meet at 7 o'clock on the evening of Wednesday, September 20th, being the opening evening of the Exhibition, to determine the awards.

GRAPES.

UNDER GLASS.—For the best two clusters of Black Hamburg....$ 3 00
For the second best..... 2 00
For the third best..... 1 00
For the best two clusters of any other named Black Grape..... 2 00
For the second best..... 1 00
For the best two clusters of White Muscat..... 2 00
For the second best..... 1 00
For the best two clusters of White Frontignan..... 2 00
For the second best..... 1 00

For the best two clusters of any other named White..... $2 00
For the second best..... 1 00
For the best two clusters of Grizzly Frontignan..... 2 00
For the second best..... 1 00
OPEN AIR.—For the best four clusters of Concord..... 2 00
For the best four clusters of Delaware..... 2 00
For the best four clusters of Diana..... 2 00
For the best four clusters of Hartford Prolific..... 1 00
For the best four clusters of Iona..... 2 00
For the best four clusters of Rogers No. 3, (Massasoit)..... 2 00
For the best four clusters of Rogers No. 9, (Lindley)..... 2 00
For the best four clusters of Rogers No. 15, (Agawam)..... 2 00
For the best four clusters of Rogers No. 19, (Merrimac)..... 2 00
For the best four clusters of Salem..... 2 00
For the best four clusters of Worden..... 2 00

PEACHES.

For the best collection of six named varieties, not less than ten specimens each..... 6 00
For the second best..... 4 00
For the third best..... 2 00
For the best three named varieties of twelve specimens each..... 3 00
For the second best..... 2 00
For the best one named variety of twelve specimens..... 2 00
For the second best..... 1 00
For the best twelve specimens of any other named variety..... 1 00

PLUMS.

For the best collection of not less than four named varieties..... 3 00
For the second best..... 2 00
For the best three varieties..... 2 00
For the second best..... 1 00
For the best single plate..... 2 00
For the second best..... 1 00

QUINCES.

For the best collection of not less than three varieties..... 5 00
For the second best..... 3 00
For the best twelve Orange Quinces..... 3 00
For the second best..... 2 00

CRAB APPLES.

For the best display	$3 00
For the second best	2 00
For the best dish of twenty-four specimens of any named variety.	2 00
For the second best	1 00

PEARS.

COMMITTEE —Henry L. Parker, *Chairman;* Henry Phelps, John C. Newton, James Draper, of *Worcester;* and Newell Wood, of *Millbury.*

☞ The Committee will meet at 7 o'clock on the evening of Wednesday, September 20th, being the opening evening of the Exhibition, to determine the awards.

CLASS 1.—

For the best twelve Bartlett	$ 3 00
For the second best	2 00
For the third best	1 00
For the best twelve Beurre Bosc	3 00
For the second best	2 00
For the third best	1 00
For the best twelve Beurre Clairgeau	1 00
For the best twelve Beurre d'Anjou	3 00
For the second best	2 00
For the third best	1 00
For the best twelve Beurre Delaunoy	2 00
For the second best	1 00
For the best twelve Beurre Diel	2 00
For the second best	1 00
For the best twelve Beurre Hardy	1 00
For the best twelve Beurre Langelier	2 00
For the second best	1 00
For the best twelve Beurre Superfin	3 00
For the second best	2 00
For the third best	1 00

For the best twelve Dix	$1 00
For the best twelve Doyenné Boussoc	2 00
For the second best	1 00
For the best twelve Doyenné du Comice	3 00
For the second best	2 00
For the third best	1 00
For the best twelve Duchesse d'Angoulême	3 00
For the second best	2 00
For the third best	1 00
For the best twelve Durandeau	2 00
For the second best	1 00
For the best twelve Flemish Beauty	2 00
For the second best	1 00
For the best twelve Goodale	2 00
For the second best	1 00
For the best twelve Glou Morceau	3 00
For the second best	1 00
For the best twelve Howell	2 00
For the second best	1 00
For the best twelve Josephine de Malines	3 00
For the second best	1 00
For the best twelve Lawrence	3 00
For the second best	2 00
For the third best	1 00
For the best twelve Louise Bonne de Jersey	3 00
For the second best	2 00
For the third best	1 00
For the best twelve Marie Louise	2 00
For the second best	1 00
For the best twelve Mt. Vernon	1 00
For the best twelve Onondaga	2 00
For the second best	1 00
For the best twelve Paradis d'Automne	2 00
For the second best	1 00
For the best twelve Seckel	3 00
For the second best	2 00
For the third best	1 00
For the best twelve Sheldon	3 00
For the second best	2 00
For the third best	1 00

For the best twelve St. Ghislain	$ 2 00
For the second best	1 00
For the best twelve St. Michel	2 00
For the second best	1 00
For the best twelve St. Michel Archange	2 00
For the second best	1 00
For the best twelve Urbaniste	2 00
For the second best	1 00
For the best twelve Vicar of Winkfield	2 00
For the second best	1 00
For the best twelve Washington	2 00
For the second best	1 00
For the best twelve Winter Nelis	3 00
For the second best	2 00
For the third best	1 00

CLASS 2. (NEW PEARS.)

For the best twelve Beurre de l' Assomption	2 00
For the second best	1 00
For the best twelve Souvenir du Congrés	2 00
For the second best	1 00
For the best twelve Duchesse de Bordeaux	1 00
For the best twelve Dr. Reeder	1 00
For the best twelve Helene Grégoire	1 00
For the best twelve Huyshe's Prince Consort	1 00
For the best twelve Rutter	1 00
For the best twelve Emile d' Heyst	1 00
For the best twelve Doyenné Hovey	1 00
For the best twelve Souvenir d' Esperen	1 00
For the best twelve Gen. Todleben	1 00
For the best twelve Duc de Bordeaux	1 00

☞ The following Special Premiums are offered by the Secretary:

For the twelve best specimens of Beurre Bosc	5 00
For the twelve best specimens of Doyenné du Comice	5 00
For the twelve best specimens of Sheldon	5 00
For the twelve best specimens of Washington	5 00

It will be required that these specimens shall be at least equal, in all respects, to any that were ever exhibited in Horticultural Hall; and that the several lots entered for competition shall remain the property of the

Society, to be shown in Philadelphia if worthy; or to be sold for the benefit of the Society, if not deemed fit for that high honor.

☞ Competition for these Special Premiums is open to Pomologists throughout the Commonwealth.

PLANTS, FLOWERS, &C.

COMMITTEE.—Samuel Flagg, *Chairman;* George E. Francis, Clarendon Harris, David S. Messinger, and Henry L. Shumway, of *Worcester.*

☞ The Committee will meet at 7 o'clock on the evening of Wednesday, September 20th, being the opening evening of the Exhibition, to determine the awards.

[RULE: All Pot-Plants shall have been grown in the Pots in which they are exhibited.]

ASTERS.—

For the best display (one stand)	$ 3 00
For the second best	2 00
For the third best	1 00
For the fourth best	1 00

BASKET.—(HANGING)—

For the best, grown at least one month in the basket	3 00
For the second best	2 00
For the third best	1 00

BOUQUETS.—(HAND)—

For the best pair	3 00
For the second best	2 00

BOUQUETS.—(PARLOR)—

For the best pair	3 00
For the second best	2 00

DAHLIAS.—

For the best twelve named varieties	2 00

DESIGN.—(Floral)—

For the best.... .....$ 4 00
For the second best..... 2 00

FLOWERS.—(Cut)— [Variety and arrangement will be considered as well as rarity and quantity.]

For the best Collection, and best kept during the Exhibition, not exceeding three stands..... 6 00
For the second best 4 00
For the third best..... 2 00
For the best Stand..... 3 00
For the second best..... 2 00
For the third best..... 1 00
For the best arranged Basket or Dish..... 3 00
For the second best..... 2 00

GLADIOLUS.—

For the best Collection, named or unnamed varieties..... 5 00
For the second best..... 3 00
For the best ten named varieties..... 3 00
For the second best..... 2 00
For the best specimen spike..... 1 00
For the best seedling 1 00

PANSIES.

For the best display..... 3 00
For the second best..... 2 00
For the third best..... 1 00

PINKS.—(China)—

For the best display..... 2 00
For the second best..... 1 00

PETUNIAS.—

For the best display..... 2 00
For the second best..... 1 00

VERBENAS.—

For the best display..... 3 00
For the second best..... 2 00
For the third best..... 1 00
For the best display of seedlings..... 2 00

STOVE AND GREENHOUSE PLANTS.

PLANTS WITH ORNAMENTAL FOLIAGE.—

For the best twelve	$ 15 00
For the second best	8 00
For the best six	5 00
For the second best	3 00
For the best single	3 00
For the second best	1 00

PLANTS IN BLOOM.—

For the best four	5 00
For the second best	3 00
For the best single	3 00
For the second best	1 00

RARE AND NEW PLANTS.—

For the best collection	6 00
For the second best	4 00

FERNS AND LYCOPODS.—

For the best collection	6 00
For the second best	4 00

PARLOR PLANTS IN POTS.—(From Amateurs.)—

For the best collection, not exceeding twelve varieties	5 00
For the second best	3 00
For the best single Plant	2 00
For the second best	1 00

FERNERY OR WARDIAN CASE, from any source.—

For the best	3 00
For the second best	1 00

VEGETABLES.

COMMITTEE.—Alexander Marsh, *Chairman;* Thomas R. Norcross, J D. Lovell, Charles Belcher, and William H. Hackett, of *Worcester.*

☞ All entries in this Department must be made with the Secretary before the 16th day of September. And all Vegetables exhibited for premiums must be in the Hall of Ceres by 6 o'clock P. M., on Wednesday, the 20 th day of September.

☞ The Committee will meet at 7 o'clock on the evening of Wednesday, September 20th, this being the opening evening of the Exhibition, to determine the awards.

BEANS.—

For the best four varieties ..... $ 1 00

BEETS.—

For the best six Long Blood 1 00
For the best six Early Bassano 1 00
For the best six Egyptian 1 00
For the best six Sugar 1 00
For the best six Turnip 1 00

CABBAGES.—

For the best two Large Flat Brunswick 2 00
For the best single specimen 1 00
For the best two Drumhead 2 00
For the best single specimen Drumhead, weight not less than 30 lbs 2 00
For the best two Drumhead Savoy 2 00
For the best single specimen 1 00
For the best two Early Sweinfurth 2 00
For the best single specimen 1 00
For the best two Red 2 00
For the best single specimen 1 00
For the best two Savoy 2 00
For the best single specimen 1 00

CARROTS.—

For the best six Early Horn or Short Scarlet 1 00
For the best six Long Orange 1 00
For the best six Red 1 00
For the best six White 1 00

CAULIFLOWERS.—

For the best three specimens..... $ 2 00
For the best single specimen..... 1 00

CELERY.—

For the best six roots..... 3 00
For the second best..... 2 00

CORN.—

For the best collection of Sweet, not less than five named varieties..... 4 00
For the second best..... 3 00
For the best six ears of Sweet..... 2 00
For the second best..... 1 00
For the best Yellow or Field, of twenty ears traced..... 2 00
For the second best..... 1 00

CRANBERRIES.—

For the best peck..... 1 00

CUCUMBERS.—

For the best half peck for pickling..... 2 00

EGG PLANT.—

For the best three specimens..... 1 00

HORSE RADISH.—

For the best six roots..... 1 00

MELONS.—

For the best two Water..... 2 00
For the second best..... 1 00
For the best Green Flesh, three specimens..... 2 00
For the best Yellow Flesh, three specimens..... 2 00

ONIONS.—

For the best four varieties, a half peck of each..... 3 00
For the second best..... 2 00
For the best half peck of Red..... 1 00
For the best half peck of Silver Skin..... 1 00
For the best half peck of White Portugal..... 1 00
For the best half peck of Yellow Danvers..... 1 00

PARSNEPS.—

For the best six Guernsey..... 1 00
For the best six Hollow Crown..... 1 00

For the best six Student.....$ 1 00
For the best six Short..... 1 00

POTATOES.—

For the best five named varieties, half a peck of each..... 6 00
For the second best..... 4 00
For the third best..... 3 00

PUMPKINS.

For the best three, weight not less than 20 lbs each..... 2 00
For the second best..... 1 00

PEPPERS.—

For the best half peck..... 1 00

SALSIFY.—

For the best six specimens..... 1 00

SQUASHES.—

For the best three pure Crookneck..... 2 00
For the best three pure Canada Crookneck..... 2 00
For the best three Pure Hubbard..... 2 00
For the best three pure Mammoth..... 2 00
For the best three pure Marblehead..... 2 00
For the best three pure Marrow..... 2 00
For the best three pure Turban..... 2 00

TOMATOES.—

For the best Boston Market..... 1 00
For the best twelve Lester..... 1 00
For the best twelve Tilden..... 1 00
For the best twelve Trophy..... 1 00
For the best twelve of any other named variety..... 1 00

TURNIPS.—

For the best six English or Flat, white or yellow..... 1 00
For the best six White Swedes..... 1 00
For the best twelve Yellow Swedes..... 1 00

☞ And a Premium of two dollars ($2.00) is offered by the Secretary for the best three (3) pure Yokohama Squashes.

A. D., 1877—MARCH.

SPECIAL EXHIBITION OF CHINESE AND OTHER PRIMROSES, CYCLAMENS, HYACINTHS, AND OTHER SPRING-BLOOMING PLANTS.

PLANTS IN BLOOM.—

For the best general display	$ 5 00
For the second best general display	3 00

PRIMROSES.—

For the best six in bloom	3 00
For the second best	2 00
For the best single plant	2 00
For the second best single plant	1 00

CYCLAMENS.—

For the best six in bloom	3 00
For the second best six in bloom	2 00
For the best single plant	2 00
For the second best single plant	1 00

HYACINTHS.—

For the best six in pots	3 00
For the best three in pots	1 00
For the best single specimen	1 00

TRANSACTIONS

OF THE

Worcester County Horticultural Society,

FOR THE YEAR 1876;

COMPRISING

THE REPORTS OF THE COMMITTEES AT THE ANNUAL EXHIBITION; THE ANNUAL REPORT OF THE SECRETARY FOR THE YEAR 1876.

REPORTS.

REPORT ON APPLES.

COMMITTEE.—Wm. T. Harlow, *Chairman;* James F. Allen, Rufus Woodward, Samuel A. Knox, of *Worcester;* and John L. Brown, of *Lunenburg.*

Conspicuous among the abundant crops of the Centennial year is that of Apples. In this County this year existed the material to have made an Annual Exhibition at least the equal of that of any former year. And as regards quality, probably the apples exhibited would have borne favorable comparison with any ever exhibited in Worcester or elsewhere. But the number of exhibitors were few, and the quantity meagre indeed, considering the possibilities offered by the plenitude of the harvest.

As the result of some reflection upon the neglect of apple growers of the County to exhibit their fruit at the show of this Society, your Committee desire to take this opportunity to say that, in their judgment, there is a deeper reason for such neglect than has been commonly supposed. In view of the uncertainty of the apple crop, and the general low price of apples, the New England grower thereof hath been for some years last past rather dubiously turning over in his mind the question: What doth it profit a man to grow apples? No New England crop is subject to such variations as that of apples — variation both of production and of market. In odd years only a nominal crop is to be expected, and to the rule that assigns an abundant yield to some years, there are such exceptions as almost to discredit the rule. And when, after many years of patient waiting (equal at least to a generation of men) for his orchard

to grow, at last, in alternate years, provided neither frost, nor drouth, nor insects, nor other cause patent or latent, interferes to prevent a good yield, fills his cellar and storehouses to overflowing with fruit for which there is but little market; what wonder that the patient waiter should seriously ask himself, *cui bono?*

In the flush times of money and business, five to fifteen years ago, there was not a single abundant crop of apples in the New England States. In any one of the ten years referred to, without doubt, almost any quantity of apples might have been marketed at good prices. The crops of 1872, 1874 and 1876 have all been extraordinary large and good. That of 1872, being one year before the beginning of the general commercial depression that still prevails in the country, was sold at a fair profit to the grower. The crops of 1874 and 1876 have been a drug in the market. Great quantities of excellent apples, that in the fall of 1874 were offered in vain for $1 per barrel, were in the spring following fed to cattle or made into cider. Commonly regarded as a luxury, rather than a necessity of life, apples are not, from motives of economy, purchased or used by many families, who would not think of retrenching at all in laying in a winter's supply of such an article as potatoes.

Your Committee challenge the economy as false and unsound that treats or views apples as a mere luxury. One dollar per barrel for apples is forty cents a bushel, and ten cents a peck. What equivalent of food to a peck of apples can be bought for ten cents? They are nutritious and wholesome for the young and the old, the sick and the well. They furnish a fresh vegetable acid much needed in the economy of the human system, at a season of the year when it is obtainable from no other source. It is not necessary to make them into pies, sauces or dumplings, nor even that they be baked, roasted, boiled or fried. The art of cooking, as applied to the best apples, that is, such as are large, fair, fully ripe, and neither too sour nor too sweet, is time, labor and fuel wasted.

There is an old saw about apples being gold in the morning, silver at noon and lead at night, intended, doubtless, to convey the notion that it is better to eat apples a good while before going to bed. And a most false and groundless notion it is. There is no better time to eat apples, or any thing else that is fit to eat, than just before retiring to rest — *provided* you are hungry and need to eat. It is Nature's way, and therefore the best way. All animals — and all men, too, not corrupted with the usages, traditions and crotchets of civilization — lie down and go to sleep upon a full stomach. And, unless you have so abused your digestive organ with artificial and unnatural cooking that its operation, even upon simple, natural and healthful food has become a painful process, and will

keep you awake or turn your sleep into a horrid nightmare, apples are to you gold at night as well as in the morning.

It is a popular belief that the apple was the forbi lden fruit of the primeval Eden of Hebrew tradition, and the average Bible reader will strongly maintain that the author of the book of Genesis says so. The apple was, undoubtedly, one of the fruits on which primitive man subsisted, and is worthy to have had its origin in — paradise. But that the first estate of apples and men was better than their present, and that men became wise by eating them, and *thereby* fell, we leave to the theologians. Our creed that it is wise to eat apples is not mystical; though time out of mind apples appear to have had some mystical connection with wisdom. Theophrastus says apples were the food of the ancient sages of India. Hence the names *poma sapientium* and *poma paradisiaca* (French *pomme de paradise*,) which the botanists have given to the banana. But if there be a fruit in the world that deserves these fine names, it is the apple — the fruit we mean when we say apple.

What shall be done to make growing apples pay? That the coming man will eat apples we have no doubt. And we have just as little doubt that he will have to pay a remunerative price for them. The advent of the coming man wants for nothing so much as the diffusion of correct notions of economy—domestic as well as political *oiconomia*—household knowledge. The coming man will know what it is good for him and his family to eat and he and they will eat it. He will return to the primitive instincts and usages of his prehistoric ancestors, and eat food that it is natural and healthful for him to eat—of which apples were and will be at least a part. Will he drink cider? Well, we don't pretend to know for certain, but rather guess he will—if he can afford to. But when Apples shall come to be fully appreciated as an article of food we have doubts whether it will pay to make them into cider. One of the strong points of the coming man will undoubtedly be a wise economy.

To sum up the purpose of our argument we conclude that Apple growing will pay as soon as the value of Apples as food is fully understood. Meantime, O, reader, it will certainly pay you to buy apples at $1 per barrel and eat them.

We have awarded the following premiums:

For the best ten Astrachan (Red), no entry	$ 2 00
For the second best, no entry	1 50
For the third best, no entry	1 00
For the best ten Baldwin, S. Putnam	2 00
For the second best, S. Sears	1 50
For the third best, D. B. Comins	1 00

For the best ten Cogswell, S. Sears	2 00
For the second best, A. Moore	1 50
For the third best, S. S. Foster	1 00
For the best ten Duchess of Oldenburg, no entry	2 00
For the second best, O. B. Hadwen	1 50
For the third best, Jos. C. Lovell, West Boylston	1 00
For the best ten Golden Sweet, no entry	2 00
For the second best, S. S. Foster	1 50
For the third best, O. B. Hadwen	1 00
For the best ten Gravenstein, N. Wood, Millbury	2 00
For the second best, Ashley Moore	1 50
For the third best, S. Sears	1 00
For the best ten Holden Pippin, O. B. Hadwen	2 00
For the second best, S. S. Foster	1 50
For the third best, D. S. Goddard	1 00
For the best ten Hubbardston Nonesuch, W. Y. Holman	2 00
For the second best, O. B. Hadwen	1 50
For the third best, Cyrus White, Millbury	1 00
For the best ten Leicester Sweet, Edw. S. Howes	2 00
For the second best, S. Sears	1 50
For the third best, O. B. Hadwen	1 00
For the best ten Lyscom, N. Wood, Millbury	2 00
For the second best, A. Moore	1 50
For the third best, H. Chapin	1 00
For the best ten Maiden's Blush, Jos. Boyden	2 00
For the second best, Jos. C. Lovell, W. Boylston	1 50
For the third best, Geo. J. McCracken	1 00
For the best ten McClellan, no award	2 00
For the second best, O. B. Hadwen	1 00
For the best ten Mother, S. Sears	2 00
For the second best, S. S. Foster	1 50
For the third best, C. White, Millbury	1 00
For the best ten Northern Spy, C. T. Foster of Holden	2 00
For the second best, N. Wood, Millbury	1 50
For the third best, S. Sears	1 00
For the best ten Peck's Pleasant, S. S. Foster	2 00
For the second best, S. Sears	1 50
For the third best, H. Marble of Millbury	1 00
For the best ten Porter, C. T. Foster, Holden	2 00
For the second best, S. P. Hicks	1 50
For the third best, Isaac Mills	1 00

For the best ten Rhode Island Greening, R. Carter, Millbury	2 00
For the second best, A. Moore	1 50
For the third best, S. Putnam	1 00
For the best ten Roxbury Russett, N. Wood, Millbury	2 00
For the second best, S. E. Fisher	1 50
For the third best, H. Marble, Millbury	1 00
For the best ten Sweet Bough (Early) O. B. Hadwen	2 00
For the second best, no entry	1 50
For the third best, no entry	1 00
For the best ten Tallman's Sweet, A. Davis	2 00
For the second best, N. Wood, Millbury	1 50
For the third best, W. G. Maynard	1 00
For the best ten Twenty Ounce, J. Pratt	2 00
For the second best, O. B. Hadwen	1 50
For the third best, H. Marble, Millbury	1 00
For the best ten Washington Royal, O. B. Hadwen	2 00
For the second best, no award	1 50
For the third best, S. S. Foster	1 00
For the best ten Washington Strawberry, C. T. Foster, Holden	2 00
For the second best, S. S. Foster	1 50
For the third best, no award	1 00
For the best ten Williams' Early Red, S. S. Foster	2 00
For the second best, O. B. Hadwen,	1 50
For the third best, Edw. S. Howes	1 00

GRATUITIES.—

N. Wood of Millbury, Bellefleur	1 00
Mrs. S. Shaff of Leicester, Harvey	1 00
J. Dusenbury, Fall Pippin	1 00
S. E. Fisher, Foundling	1 00

WILLIAM T. HARLOW,

For the Committee on Apples.

REPORT ON GRAPES, PEACHES, &c.

COMMITTEE.—William H. Earle, *Chairman;* Thomas M. Lamb, Chas. Goodwin, of *Worcester;* George Cruickshanks, of *Whitinsville;* and F. M. Marble of *Grafton.*

GRAPES.

UNDER GLASS.—For the best two clusters of Black Hamburg, P. L. Moen ..... $ 3 00
For the second best, W. T. Merrifield 2 00
For the third best, S. Salisbury 1 00
For the best two clusters of any other named Black Grape, P. L. Moen, "Wilmot." 2 00
For the second best, S. Salisbury, "Trentham" 1 00
For the best two clusters of White Muscat, no award. 2 00
For the second best, P. L Moen 1 00
For the best two clusters of White Frontignan, no entry 2 00
For the second best, no entry 1 00
For the best two clusters of any other named White, S. Salisbury, "White Tokay." 2 00
For the second best, P. L. Moen, "Cannon Hall Muscat." 1 00
For the best two clusters of Grizzly Frontignan, P. L. Moen 2 00
For the second best, no award 1 00
OPEN AIR.—For the best four clusters of Concord, F. J. Kinney 2 00
For the best four clusters of Delaware, Moses Church 2 00
For the best four clusters of Diana, S. J. Brimhall 2 00
For the best four clusters of Hartford Prolific, William H. Earle 1 00

For the best four clusters of Iona, Horatio Phelps..... 2 00
For the best four clusters of Rogers No. 3, (Massasoit), no entry.. 2 00
For the best four clusters of Rogers No. 9, (Lindley), Horatio Phelps..... 2 00
For the best four clusters of Rogers No. 15, (Agawam), S. J. Brimhall..... 2 00
For the best four clusters of Rogers No. 19, (Merrimac), F. J. Kinney..... 2 00
For the best four clusters of Salem, Horatio Phelps..... 2 00
For the best four clusters of Worden, Horatio Phelps..... 2 00

PEACHES.

For the best collection of six named varieties, not less than ten specimens each, no entry..... 6 00
For the second best, no entry..... 4 00
For the third best, no entry..... 2 00
For the best three named varieties of twelve specimens each, no entry..... 3 00
For the second best, no entry..... 2 00
For the best one named variety of twelve specimens, Frederick Hancock, "Late Crawford"..... 2 00
For the second best, F. J. Kinney, "President."..... 1 00
For the best twelve specimens of any other named variety, Newell Wood, "Old Mixon."..... 1 00

PLUMS.

For the best collection of not less than four named varieties, no entry..... 3 00
For the second best, no entry..... 2 00
For the best three varieties, no entry..... 2 00
For the second best, no entry..... 1 00
For the best single plate, S. S. Foster..... 2 00
For the second best, no entry..... 1 00

QUINCES.

For the best collection of not less than three varieties, no entry... 5 00
For the second best, no entry..... 3 00
For the best twelve Orange Quinces, Newell Wood..... 3 00
For the second best, Charles Nash..... 2 00

CRAB APPLES.

For the best display, F. J. Kinney..... 3 00
For the second best, James Draper..... 2 00
For the best dish of twenty-four specimens of any named variety, Mrs. George A. Chamberlain..... 2 00
For the second best, William Howe, Millbury..... 1 00

WILLIAM H. EARLE, *Chairman.*

REPORT ON PLANTS, FLOWERS, &C.

COMMITTEE.—Samuel Flagg, *Chairman;* George E. Francis, Clarendon Harris, David S. Messinger, and Henry L. Shumway, of *Worcester.*

[RULE: All Pot-Plants shall have been grown in the Pots in which they are exhibited.]

ASTERS.—

For the best display (one stand), Mrs Geo. H. Estabrook.....$ 3 00
For the second best Mrs. Shaff, Leicester..... 2 00
For the third best, Miss A. Lovell, West Boylston..... 1 00
For the fourth best, no award..... 1 00

BASKET.—HANGING.—

For the best, grown at least one month in the basket, Mrs. David Scott..... 3 00
For the second best, Mrs. C. E. Brooks..... 2 00
For the third best, Mrs. T. L. Nelson..... 1 00

BOUQUETS.—(HAND).—

For the best pair, Mr. S Salisbury..... 3 00
For the second best, no award..... 2 00

BOUQUETS —(PARLOR).—

For the best pair, Mrs. T. L. Nelson..... 3 00
For the second best, Mrs. Shaff, Leicester..... 2 00

DAHLIAS.—

For the best twelve named varieties, no award 2 00

DESIGN.—(Floral).—

For the best, Mrs. C. E. Parker, Holden..... 4 00

For the second best, Mrs. C. E. Brooks..... 2 00

FLOWERS.—(Cut)— [Variety and arrangement will be considered as well as rarity and quantity.]

For the best Collection, and best kept during the Exhibition, not exceeding three stands, Mr. S. Salisbury..... 6 00

For the second best, no award..... 4 00

For the third best, no award..... 2 00

For the best stand, Mrs. David Scott..... 3 00

For the second best, Mrs. C. E. Brooks..... 2 00

For the third best, Mrs. Fitts, Oxford..... 1 00

For the best arranged Basket or Dish, Mrs. C. E. Brooks..... 3 00

For the second best, Mrs. T. L. Nelson..... 2 00

GLADIOLUS.—

For the best Collection, named or unnamed varieties, Miss A. Lovell, West Boylston..... 5 00

For the second best, no award..... 3 00

For the best ten named varieties, Miss A. Lovell, W. Boylston 3 00

For the second best, no award..... 2 00

For the best specimen spike, Miss A Lovell, W. Boylston.... 1 00

For the best seedling, Miss A. Lovell, " " 1 00

PANSIES.—

For the best display, Mr. S. Salisbury..... 3 00

For the second best, Mr. C. A. Keyes..... 2 00

For the third best, Mr. Frank Wheeler..... 1 00

PINKS.—(China)—

For the best display, Mrs. Shaff, Leicester..... 2 00

For the second best, Mr. C. A. Keyes..... 1 00

PETUNIAS.—

For the best display, no entry..... 2 00

For the second best, no entry..... 1 00

VERBENAS.—

For the best display, Mr. C. A. Keyes..... 3 00

For the second best, no award..... 2 00

For the third best, no award..... 1 00

For the best display of seedlings, Mrs. C. E. Brooks..... 2 00

STOVE AND GREENHOUSE PLANTS.

PLANTS WITH ORNAMENTAL FOLIAGE—

For the best twelve, Mr. S. Salisbury ..... $ 15 00
For the second best, Mr. Wm. T. Merrifield 8 00
For the best six, Mr. S. Salisbury 5 00
For the second best, Mr. Wm. T. Merrifield 3 00
For the best single, Mr. P. L. Moen 3 00
For the second best, Mr. S. Salisbury 1 00

PLANTS IN BLOOM.—

For the best four, no award 5 00
For the second best, no award 3 00
For the best single, Mr. P. L. Moen 3 00
For the second best, no award 1 00

RARE AND NEW PLANTS.—

For the best collection, Mr. Wm. T. Merrifield 6 00
For the second best, Mr. S. Salisbury 4 00

FERNS AND LYCOPODS.—

For the best collection, Mr. S. Salisbury 6 00
For the second best, Mr. Wm. T. Merrifield 4 00

PARLOR PLANTS IN POTS—(FROM AMATEURS).—

For the best collection, not exceeding twelve varieties, Mrs. T. L. Nelson 5 00
For the second best, Mrs. David Scott 3 00
For the best single plant, Mrs. T. L. Nelson 2 00
For the second best, Mrs. David Scott 1 00

FERNERY OR WARDIAN CASE, from any source.—

For the best, Mrs. T. L. Nelson 3 00
For the second best, Mrs. David Scott 1 00

GRATUITIES.—

For display of Asters, Petunias, Pinks and Verbenas, Mrs. F. H. Dewey 1 00
For Parlor Plants and Seedling Geranium, Mrs. S. D. Ward of Shrewsbury 2 00
For Floral Design, Miss Ella Ward, Shrewsbury 1 00
For Wild Flowers, Berries and Floral Design, Miss Anne Pratt, Shrewsbury 1 00
For display of Flowers and Ice Plant, Mrs. Mowrey, Shrewsbury .. 2 00
For Fuchsia in bloom, Mrs C. L. Allen 1 00

For Tritoma in bloom, Mr. F. J. Kinney	1 00
For stand of superb Zinnias, Mrs. Geo. H. Estabrook	2 00
For dish of Wild Berries and Autumn Leaves, Mrs. M. E. Woodward	1 00
For basket of Dried Ferns and Leaves, Mrs. S. E. Fisher	1 00
For vase of Dried Grasses, Miss Mary Hastings	1 00
For Hanging Basket, Mr. S. Salisbury	2 00
For Anchor of wild berries, Miss Mary Cummings Shrewsbury	2 00

Owing to the fine display in every class of plants and flowers, the Committee found great difficulty in deciding how to award the premiums satisfactory to all contributors. Trusting, however, that all concerned will concur in our decision, we submit the above report.

SAMUEL FLAGG, *Chairman.*

REPORT ON PEARS.

COMMITTEE.—Henry L. Parker, *Chairman;* Henry Phelps, John C. Newton, James Draper, of *Worcester;* and Newell Wood, of *Millbury.*

The Committee on Pears respectfully submit the following report:

Although the season has not been particularly propitious, no finer fruit, as a whole, has been shown at our annual exhibitions. The Committee were inclined to attribute this to the single entry system, believing that the effect of that system is to induce more care on the part of contributors in the selection of specimens.

The venerable President of the Massachusetts Horticultural Society, in his address before the Pomological Convention at Boston, a few years since, advanced the theory that the time was soon coming when cultivators would be compelled to give to our native varieties of Pears the first rank, as being better adapted to our peculiarities of climate and soil. It is noticeable in confirmation of this theory, that at each succeeding exhibition our native Pears are coming to the front. It will be seen that upon the Society's list for cultivation the native pears are largely in the

ascendant, and the presumption is that when the revision of that list (so sadly needed) shall be made, they will be even more largely represented. Fruit growers are recognizing this truth in regard to other varieties of fruit. Mr. J. B. Moore of Concord, who from his experience can surely speak with authority, in some late remaks upon this subject, before the State Board of Agriculture, says, in substance, that all seedling fruits require for their best developement the same characteristics of soil as that in which they originate—that Western seedling Strawberries will not thrive at the East—that an apple originating in a cold, wet soil, cannot be made to do well in a dry. And, upon the subject of Pears he says that, while thirty years ago, with the exception of the Seckel, we were almost entirely dependent upon foreign varieties, now in selecting a list of fifteen, he can make at least ten of them American varieties It is gratifying, in this connection, to be able to state that this Society has, through one of its late members, the lamented John Milton Earle, made one really valuable contribution to the list of our native Pears. This Pear (Earle's Bergamot) was shown at the Annual Exhibition by V. P. Townsend. It is highly flavored, aromatic, and in quality *première.* We have faith that it will prove to its originator "*monumentum aere perennius.*"

The Committee have made the following award of premiums :

CLASS 1.—

For the best twelve Bartlett, M. O. Whittier,	$ 3 00
For the second best, Newell Wood	2 00
For the third best, Alfred Davis	1 00
For the best twelve Beurre Bosc, E. W. Lincoln	3 00
For the second best, Joseph Boyden	2 00
For the third best, William H. Earle	1 00
For the twelve best Beurre Clairgeau, Wm. H. Earle	1 00
For the best twelve Beurre d'Anjou, O. B. Hadwen	3 00
For the second best, S. S. Foster	2 00
For the third best, Daniel Kinsley	1 00
For the best twelve Beurre Delaunoy, O. B. Hadwen	2 00
For the second best, no award	1 00
For the best twelve Buerre Diel, H. L. Parker	2 00
For the second best, J. F. Allen	1 00
For the best twelve Beurre Hardy, O. B. Hadwen	1 00
For the best twelve Beurre Langelier, V. P. Townsend	2 00
For the second best, F. G. Stiles,	1 00

For the best twelve Beurre Superfin, Moses Church..... 3 00
For the second best, S. J. Brimhall..... 2 00
For the third best, James Draper..... 1 00
For the best twelve Dix, S. S. Foster..... 1 00
For the best twelve Doyenné Boussoc, O. B. Hadwen..... 2 00
For the second best, Newell Wood, Millbury..... 1 00
For the best twelve Doyenné du Comice, S. S. Foster..... 3 00
For the second best, E. W. Lincoln..... 2 00
For the third best, P. L. Moen..... 1 00
For the best twelve Duchesse d'Angoulême, S. P. Hicks..... 3 00
For the second best, D. S. Goddard..... 2 00
For the third best, O. B. Hadwen..... 1 00
For the best twelve Durandeau, James Draper..... 2 00
For the second best, Stephen Salisbury..... 1 00
For the best twelve Flemish Beauty, Mrs. Marshall Flagg..... 2 00
For the second best, Joseph Boyden..... 1 00
For the best twelve Goodale, Joseph C. Lovell, W. Boylston..... 2 00
For the second best, no award..... 1 00
For the best twelve Glou Morceau, Newell Wood..... 3 00
For the second best, S. S. Foster..... 1 00
For the best twelve Howell, Mrs. G. A. Chamberlain..... 2 00
For the second best, Moses Church..... 1 00
For the best twelve Josephine de Malines, E. W. Lincoln..... 3 00
For the second best, no award..... 1 00
For the best twelve Lawrence, Charles T. Foster..... 3 00
For the second best, Wm. H. Earle..... 2 00
For the third best, Alfred Davis..... 1 00
For the best twelve Louise Bonne de Jersey, Daniel Kinsley..... 3 00
For the second best, Moses Church..... 2 00
For the third best, Mrs. G. A. Chamberlain..... 1 00
For the best twelve Marie Louise, S. S. Foster..... 2 00
For the second best, Chas. S. Foster..... 1 00
For the best twelve Mt. Vernon, O. B. Hadwen..... 1 00
For the best twelve Onondaga, Joseph Dusenbury..... 2 00
For the second best, Wm. H. Earle..... 1 00
For the best twelve Paradis d'Automne, V. P. Townsend..... 2 00
For the second best, F. M. Marble..... 1 00
For the best twelve Seckel, Stephen Salisbury..... 3 00
For the second best, F. M. Marble..... 2 00
For the third best, Alfred Davis..... 1 00
For the best twelve Sheldon, O. B. Hadwen..... 3 00

For the second best, Wm. G. Maynard	2 00
For the third best, R. R. Crane	1 00
For the best twelve St. Ghislain, Mrs. Geo. A. Chamberlain	2 00
For the second best, Newell Wood	1 00
For the best twelve St. Michel, H. Chapin	2 00
For the second best, Joseph C. Lovell	1 00
For the best twelve St. Michel Archange, Geo. M. Pierce	2 00
For the second best, O. B. Hadwen	1 00
For the best twelve Urbaniste, O. B. Hadwen	2 00
For the second best, Joseph C. Lovell	1 00
For the best twelve Vicar of Winkfield, V. P. Townsend	2 00
For the second best, Wm. H. Earle	1 00
For the best twelve Washington, E. W. Lincoln	2 00
For the second best, no entry	1 00
For the best twelve Winter Nelis, E. W. Lincoln	3 00
For the second best, James Draper,	2 00
For the third best, Alfred Davis	1 00
For the twelve best specimens of Beurre Bosc (Special), Wm. H. Earle	5 00

GRATUITIES.—

Joseph Pratt, Dunmore	1 00
V. P. Townsend, Earle's Bergamot	1 00

HENRY L. PARKER, *Chairman.*

REPORT ON VEGETABLES.

COMMITTEE.—Alexander Marsh, *Chairman;* Thomas R. Norcross, J. D. Lovell, Charles Belcher, and William H. Hackett, of *Worcester.*

The Committee on Vegetables have attended to their duties and report as follows:

There has never been a year when there was so close competition in the different lots as the present. It was almost impossible to tell exactly what we ought to do. Although almost unanimous in our opinions on the various lots, yet some might think we did not use our best judgment; but we will assure you we had no favorites. There were several premiums offered for articles which were not on exhibition. There was not quite so large a show as some previous years, owing in some measure to the extremely hot weather. We must mention those most delightful Water Melons, the largest and sweetest we ever gave a premium to, and we would recommend to those wishing to improve their Melons to get some of the premium seeds.

We do not think the small farmers or gardeners quite understand the present arrangements in the HALL OF CERES. There are no large collections as formerly, but it is so arranged that a person who owns a few rods of land can compete for the premiums as well as the largest farmers, and is as sure of his premiums, if he has the best Beets, Cabbages, Squashes, Onions, Beans, Potatoes, Corn, Tomatoes, or Melons, &c.

Your Committee would most earnestly recommend that in future the premiums be offered and given to the best and most perfect specimens, without regard to size; what we mean is, such as people would be most likely to buy at the market for their own use. The object is to improve the quality, instead of the large, overgrown products, which have to be fed out to the cattle to get rid of them. If an arrangement could be made whereby the articles could be on the tables by four o'clock, the Committee would have time to arrange them before the evening services begin, and very much lighten their evening's work.

BEANS.—

For the best four varieties, State Lunatic Hospital.....$ 1 00

BEETS.—

For the best six Long Blood, P. L. Moen.... .... 1 00
For the best six Early Bassano, Samuel Putnam..... 1 00
For the best six Egyptian, Frank J. Kinney..... 1 00
For the best six Sugar, Samuel Putnam.... ..... 1 00
For the best six Turnip, Sylvanus Sears..... 1 00

CABBAGES.—

For the best two Large Flat Brunswick, State Lunatic Hospital 2 00
For the best single specimen, Simon E. Fisher..... 1 00
For the best two Drumhead, Simon E. Fisher..... 2 00
For the best single specimen Drumhead, weight not less than 30 lbs , no entry..... 2 00
For the best two Drumhead Savoy, Simon E. Fisher..... 2 00
For the best single specimen, no entry..... ..... 1 00
For the best two Early Sweinfurth, Simon E. Fisher..... 2 00
For the best single specimen, Simon E. Fisher..... 1 00
For the best two Red, State Lunatic Hospital..... 2 00
For the best single specimen, State Lunatic Hospital..... 1 00
For the best two Savoy, Joseph Pratt..... 2 00
For the best single specimen, Simon E. Fisher..... 1 00

CARROTS.—

For the best six Early Horn or Short Scarlet, Samuel Putnam 1 00
For the best six Long Orange, Stephen Salisbury..... 1 00
For the best six Red, no entry..... ..... 1 00
For the best six White, Samuel Putnam..... 1 00

CAULIFLOWERS.—

For the best three specimens, Sylvanus Sears..... .... 2 00
For the best single specimen, S. H. Allen, Shrewsbury... 1 00

CELERY.—

For the best six roots, Daniel Tainter..... 3 00
For the second best, P. W. McDonald..... 2 00

CORN.—

For the best collection of Sweet, not less than five named varieties, Alden H. Sears..... 4 00
For the second best, Frank J. Kinney..... ..... 3 00

For the best six ears of Sweet, Samuel Putnam..... 2 00
For the second best, Sylvanus Sears..... 1 00
For the best Yellow or Field, of twenty ears traced, Mrs. Geo. A. Chamberlain..... 2 00
For the second best, F. J. Kinney..... 1 00

CRANBERRIES —

For the best peck, no entry..... 1 00

CUCUMBERS.—

For the best half peck for pickling, Sylvanus Sears..... 2 00

EGG PLANT.—

For the best three specimens, State Lunatic Hospital..... 1 00

HORSE RADISH.—

For the best six roots, Mrs. M. E. Woodward..... 1 00

MELONS.—

For the best two Water, Henry E. Rich..... 2 00
For the second best, Eben Jewett..... 1 00
For the best Green Flesh, three specimens, no entry..... 2 00
For the best Yellow Flesh, three specimens, no entry..... 2 00

ONIONS.—

For the best four varieties, a half peck of each, no entry. . 3 00
For the second best, no entry..... 2 00
For the best half peck of Red, State Lunatic Hospital..... 1 00
For the best half peck of Silver Skin, P. W. McDonald..... 1 00
For the best half peck of White Portugal, no entry..... 1 00
For the best half peck of Yellow Danvers, State Lunatic Hospital..... 1 00

PARSNEPS.—

For the best six Guernsey, Stephen Salisbury..... 1 00
For the best six Hollow Crown, Ashley Moore..... 1 00
For the best six Student, Sylvanus Sears..... 1 00
For the best six Short, no entry..... 1 00

POTATOES.—

For the best five named varieties, half a peck of each, F. J. Kinney..... 6 00
For the second best, Sylvanus Sears..... 4 00
For the third best, Cyrus White, Millbury..... 3 00

PUMPKINS.—

For the best three, weight not less than 20 lbs. each, Stephen Salisbury..... 2 00
For the second best, Simon E. Fisher..... 1 00

PEPPERS.—

For the best half peck, State Lunatic Hospital..... 1 00

SALSIFY.—

For the best six specimens, P. L. Moen..... 1 00

SQUASHES.—

For the best three pure Crookneck, no entry..... 2 00
For the best three pure Canada Crookneck, Simon E. Fisher.. 2 00
For the best three pure Hubbard, Isaac Mills..... 2 00
For the best three pure Mammoth, P. L. Moen..... 2 00
For the best three pure Marblehead, Simon E. Fisher..... 2 00
For the best three pure Marrow, Sylvanus Sears 2 00
For the best three pure Turban, Alden H. Sears 2 00

TOMATOES.—

For the best Boston Market, State Lunatic Hospital..... 1 00
For the best twelve Lester, State Lunatic Hospital..... 1 00
For the best twelve Tilden, F. J. Kinney..... 1 00
For the best twelve Trophy, Alden H. Sears..... 1 00
For the best twelve of any other named variety, "Wilcott," P. L. Moen..... 1 00

TURNIPS.—

For the best six English or Flat, white or yellow, Simon E. Fisher..... 1 00
For the best six White Swedes, no entry..... 1 00
For the best twelve Yellow Swedes, Sylvanus Sears..... 1 00

GRATUITIES.—

For Flat Dutch Cabbage, State Lunatic Hospital..... 1 00
For the best three pure Yokohama Squashes (offered by the Secretary), Simon E. Fisher..... 2 00

ALEXANDER MARSH, *Chairman.*

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society:

The condition of the Library is such that a lengthy report is not needed. The Librarian is sorry to say that the books and publications furnished by the Society have not been as extensively used by the members as they were last year, and he believes it to be the result of the discontinuance of our weekly meetings. It is believed that our efficient Library Committee intend to place such books on our shelves as are of real value, and to furnish such publications as have the best reputation.

Additions to the Library during the past official year both by purchase and donation, are as follows:

Report of the Commissioner of Education for 1874; from John Eaton, Commissioner.

Gardening for Pleasure; by Peter Henderson. Society.

Natural History of Plants; H. Burlton. Vol. 4. Society.

Twelfth Annual Report of the Board of Charity; from Hon. Edward Earle.

Transactions of the California State Agricultural Society, 1874; from O. B. Hadwen.

Transactions of the New York State Agricultural Society, 1870.

Schedule of Prices of Massachusetts Horticultural Society, 1876; from E. W. Buswell, Treasurer.

Transactions of the Massachusetts Horticultural Society, 1875, Part 2d; from E. W. Buswell, Treasurer.

Agriculture of Massachusetts, 1875 and 1876, by C. L. Flint; from O. B. Hadwen.

Trees and Shrubs of Massachusetts, by George B. Emerson; 2 vols. 8vo. Society.

Floral Magazine, 2 vols., 1874 and 1875, bound. Society.

Journal of Horticulture, The; Vol. 25, bound; London. Society.

Florist and Pomologist; a Pictorial Monthly Magazine of Flowers, Fruits and Horticulture, conducted by R. Hogg, J. Spencer and T. Moore, 8vo. col. plates; London, 1875, bound. Society.

Seventh Annual Report, State Board of Health; from the State Board of Health.

Flore des Serres et des Jardins de l'Europe Annales Générales d'Horticulture. L. Van Houtte editor and publisher. Tome 20. 8 vo.; many cuts and col. pl.; Gand Belgigur, 1874. (Still publishing.)

Country Gentleman, The; Vols. 1 to 6, 1868-1872, L. Tucker & Son and J. S. Thomas, 650 engravings; from Geo. Cruickshanks.

Garden, The; an Illustrated Weekly Journal of Gardening in all its branches. Founded and conducted by Wm. Robinson, London, 1876. (Still Publishing.) Society.

Gardener's Chronicle, The; 1876, folio. Society.

American Agriculturist, The; Vol. 35, 1876, folio. Society.

Country Gentleman The; Vol. 41, 1876. Society.

Agricultural Gazette, The; 1876, London Folio Society.

Gardener's Monthly, The; Vol. 18, 8vo. Society.

Villa Gardener. The; 1876, 8vo., London. Society.

Massachusetts Ploughman, The; Geo. Noyes proprietor and publisher, 1876, from George Noyes.

It may be proper to state that the balance of the bill for Curtis' Botanical Magazine, mentioned in the Librarian's report of last year, has been cancelled, as will appear by the Treasurer's Report, $170.80 having been paid from the appropriation of the Library, and yet there is over $100 of the appropriation unexpended. Seven books and three pamphlets only, are now out, and those are in good hands.

All of which is respectfully submitted.

JOHN C. NEWTON,

Librarian.

HALL OF FLORA, Nov. 1st, 1876.

ANNUAL REPORT

OF THE

Secretary of the Worcester County Horticultural Society.

To The Members Of The Worcester County Horticultural Society :

In his ANNUAL REPORT for 1875, your Secretary informed you that "your co-operation has been solicited by the UNITED STATES CEN-"TENNIAL COMMISSION. What precise shape, such co-operation can "assume, your Secretary is unable, at present, to state. It has occurred "to him, however, that you might in the event of a discontinuance of the "ANNUAL AUTUMNAL EXHIBITION, propose premiums for Fruits that "have originated within the County, in amount sufficient to compel the "production of the very best specimens. Those specimens that gained the "premiums should become the property of the Society, to be exhibited at "the proper time in Philadelphia. The County need not be ashamed of "its parentage of the Holden Pippin, the Hubbardston Nonesuch; or, as "suggested by our President, the Sterling. And, in this presence, may I "not add also, among pears, Earle's Bergamot ? Should you conclude to "comply with the request of the COMMISSION, it might be well to act in "connection with the Massachusetts Horticultural Society. A display by "ourselves alone would be meagre, even if space could now be secured ; "but it would, doubtless, in aid of that venerable Society, help achieve "something for the fame and name of our ancient Commonwealth."

At a meeting of the TRUSTEES, held pursuant to a special notice, the whole matter of a proper representation of the Society at the Centennial Exhibition, was referred to a Committee composed of the President, Secretary, and Treasurer, with power to act No immediate steps were taken, as none seemed urgent. But, upon a later notification from the Director-General of the Exhibition that a Pomological Display was definitely assigned for a certain date, the Committee met and approved a proposition from your Secretary, to invite and hold a competitive trial of select specimens of Apples and Pears, on Wednesday, the 6th day of September, ult. ; the varieties, whether of Apples or Pears, being such as were specified in the schedule of the Society. An earnest appeal to the Pomologists of the County was also published in the newspapers of the city of Worcester, soliciting their co-operation and support. The response, although not so general as had been hoped, was, nevertheless, encouraging, and indicative of cordial sympathy. There were eighty-nine (89) plates of Apples offered, from which fifty-three (53) were selected. For the information of the members of the Society, and especially for the guidance of those who shall be its officers in 1976, a list of the varieties transmitted to Philadelphia is herewith submitted.

Alexander,
Baldwin,
Beauty of Kent,
Beauty Mills',
Beauty Sutton,
Colvert,
Chenango Strawberry,
Codlin, (Dutch),
Cogswell,
Drap d'Or,
Foundling,
Gravenstein,
Greening, R. I.,
" (Nameless),
Hamburg, 2 plates,
Hawthornden,
Hubbardston Nonesuch,
Jewett's Fine Red,
King of Tompkins County,
Leland's Spice,
Lovell,
Pippin, Holden, 2 plates,
" York,
" Nash,
" Worcester County,
" Fall,
Pomme Water,
Porter, 2 plates,
Primate,
Russett, Golden, of Mass.,
" Sweet, 2 plates,
" Roxbury, 2 plates,
" Singletary, (Millbury),
Spy, Northern,
Spy, Worcester, (local)
Sweet, Pumpkin, 2 plates,
" Ramsdell's,
" Leicester, (local)
" Native,
" Tallman,
" Stockwell Winter,
" Weyer,

Maiden's Blush, 2 plates,
Mother,
Canada,
Ounce — Twenty,
Native, (of Millbury),
Seedling, Nash's, from Northern Spy,
Seedling, Salisbury's,
Williams' Early Red.

There were seventy-one (71) plates of Pears contributed, from which thirty-seven (37) were picked out as of sufficient excellence. With the same laudable intent of enlightening posterity, the varieties of Pears, so chosen, are also placed upon record.

Bartlett,
Belle Lucrative,
Beurre d' Amanlis,
Beurre de l' Assomption,
Beurre Clairgeau,
Beurre d' Anjou,
Beurre—Golden,
Beurre Hardy,
Beurre Langelier,
Columbia, 2 plates,
Des Nonnes,
Dix,
Doyenné Boussoc,
Doyenné du Comice,
Duchesse,
Durandeau, 2 plates,
Flemish Beauty,
Goodale,
Howell,
Hovey—Dana's,
Louise Bonne de Jersey, 2 pl.,
Mt. Vernon,
Paradis d'Automne,
Seckel,
Sheldon,
St. Ghislain,
St. Michel,
Seedling, (Native from West Boylston),
Washington,
Winter Nelis.

Of all these varieties of Apples and Pears, how many will be popular — possibly even extant — a century hence? If the publication of these lists shall be of no other use, it may at least enable my successor, at the close of another hundred years, to point a moral, as he traces the survival of the fittest in the Pomology of his day and generation.

The Massachusetts Horticultural Society, with characteristic and ready courtesy, tendered us a portion of the space seasonably secured for its own use; and the offer was thankfully accepted. And, as it was thought best that our contribution should be sent direct from Worcester, Messrs. J. C. Newton and Henry Phelps were put in charge of it, to attend to its safe delivery and proper arrangement. To their energy and promptness is it owing that a gross blunder in transmission was remedied, at no greater cost than the personal inconvenience to which Mr. Newton, in an especial manner, subjected himself.

Of that Pomological Exhibition it is hardly necessary to speak at length. It was announced as an "Exhibition of Northern Pomological

Products," but, in juxtaposition to the Apples and Pears from Connecticut and Massachusetts, not more than two-thirds grown, were displayed the tropical fruits of California. The great States which have sprung up so rapidly, in the vast plains that stretch from the Mississippi to the Rocky Mountains, advertised themselves extensively and well. Through State organizations and Railroad Corporations, no pains were spared to proclaim the fatness of the land, so far as the cull and pick of their Fruit-crop could make the same known to advantage. That our modest contribution should reflect no discredit upon our Pomological knowledge and methods, is of itself partial praise. That it should reward judicious examination, as was the testimony of some who knew too well to estimate a collection solely by its extent, may be a satisfaction to those of you who furnished the specimens, to learn.

Upon one feature of this Pomological Exhibition, however, it would be impossible to enlarge in too strong terms of censure. Massachusetts, Ohio and New York were wholly unrepresented upon the Committee of Judges. The exclusion of their statues from funeral processions in the decadence of Ancient Rome, but served to recall to mind even more vividly the patriots Brutus and Cassius. And who of us, in looking through the roll of those who had been selected to adjudicate upon "Northern Pomological Products," could fail to note with amazement the absence of such names as JOHN A. WARDER, PATRICK BARRY, CHARLES DOWNING, JOHN J. THOMAS, and, — *clarm et venerabile nomen !*—MARSHALL P. WILDER. Honesty is an indispensable qualification for a just judge, but should not capacity also be deemed essential ?

The AMERICAN POMOLOGICAL SOCIETY having accepted an invitation to a formal reception, at the hands of the Pennsylvania Horticultural Society, on the evening of Friday, September 25th. ult., and requested this Society to accredit delegates thereto, the following named gentlemen were duly commissioned under our corporate seal, viz. : President William T. Merrifield, and Messrs. Stephen Salisbury, D. Waldo Lincoln, J. Henry Hill, Francis H. Dewey, Alexander H. Bullock, George W. Richardson, George E. Francis, O. B. Hadwen, Edward W. Lincoln, Edward Earle, Paul Whitin John C. Newton, Nathaniel Paine, Stephen Salisbury Jr., Henry Phelps, Henry L. Parker, William H. Earle, Newell Wood, William T. Harlow, George Cruickshanks, William W. Cook, Frank J. Kinney and Thomas M. Lamb. Owing to the occurrence of our own ANNUAL AUTUMNAL EXHIBITION, so early in the ensuing week, your Secretary could not await this Reception, and has therefore no personal experience of it to relate. Other delegates, however, describe it as quite as successful as could be expected, when the attractions

of the Centennial Exhibition and the inevitable fatigue of its visitors are considered. And over and beyond all — creating depression and foreboding sadness — was the enforced absence of PRESIDENT WILDER, in whose illness was universal sympathy, and without whom any attempt at festivity seemed a cheerless mockery.

Criticism of the Horticultural Exhibition in the halls of the Pennsylvania Society would be an ungracious return for an act of hospitality. But surprise may well find expression at such a meagre display, from a field so extensive and fertile. Take away the collections of Ellwanger & Barry, and of Marshall P. Wilder, from a distance ; and of two or three large cultivators from the immediate vicinity, and what remained would scarcely compare favorably with the average at our weekly exhibitions. Some fine plants were staged—the property of wealthy amateurs ; but the Floral Designs were in funereal and the worst possible taste.

It would be wrong to dismiss this subject, without some acknowledgement of the unvarying courtesy experienced by all your delegates to Philadelphia, as attested by their common consent. Countless questions answered with unfailing civility ; direction given to distant objects of interest, at personal inconvenience, by utter strangers ; a cheerful readiness to oblige at all times, and everywhere ; these slight but inestimable amenities of casual intercourse could not but impress all of us, who had trusted our lives to that avarice which crowded the Sound Steamers to suffocation and answered natural remonstrance with innate boorishness. To have had even temporary acquaintance with such a people will ever be a source of pleasant memories. Such oases in life's waste are not so numerous that one can be passed without recognition.

At a special meeting of the TRUSTEES, on the 20th day of February ultimo, it was *voted :* "That the use of the Hall and the Library of the Society be tendered to the State Board of Agriculture, during its country meeting, which is to commence on the Fourteenth (14th) day of November proximo."

Also, *voted :* "That in the event of an acceptance of this invitation, there be held simultaneously, in one of the Halls of the Society, a Free Exhibition of Flowers and Fruits grown any where within the State."

No reply was ever received by your Secretary, to his letter conveying your invitation. He has reason to believe, however, that it was gratefully accepted. It will therefore devolve upon this Society to adopt such measures as may commend themselves, in order to give complete effect to those votes of the TRUSTEES. A public and social Reception, in the evening, suggests itself, whereat delegates and visitors may have an opportunity of becoming better acquainted with each other than would

be afforded in the restriction of official intercourse. And, upon all accounts, whether for public advantage or the credit of the Society, it is greatly to be desired that we should tolerate nothing, within our power to prevent, which may have even the semblance of a wish to measure or stint our proffered hospitality. These meetings of the State Board of Agriculture are always a benefit; especially to the localities in which they are held, and which choose to profit by their opportunities for instruction. It is no argument in their disfavor that individuals may attempt their perversion into occasions for personal display: or that bores—of greater or less mitigation—exhaust a reluctant audience by the compilation and utterance of meaningless statistics or duller platitudes. There are said to be places wherein "Angels fear to tread;" *but they are never solitudes.* Let it be our privilege, separating wheat from chaff, to extract its nutriment from the one and to disperse the other to the four winds. Let us, if we sit at the feet of Gamaliel, gather up his words of wisdom, nor reproach the sage, should his feebler disciples sometimes maunder.

The property of the Society, of whatsoever nature, has been kept throughout the past year in an admirable condition. For this pleasant state of affairs, in such marked contrast to what was customary when the hall was suffered to become an object of speculation, our thanks are due to the efficiency and vigilance of our Librarian and Treasurer. Nor should it be forgotten that we have been fortunate in the character of our tenants, the prospective loss of one of whom is looked forward to with regret. It is not unlikely that improvements in Horticultural Hall may soon be required of us, alike in our own interest and in justice to the occupants of the stores upon the first floor. Competition is so active, the relation between supply and demand has become so close, that the owner whose building offers the most conveniences can command the most desirable tenants. This Society has never countenanced extortion, nor desired to take undue advantage of the necessities of those with whom it has so long sustained a pleasant connection. It will doubtless appreciate the effect upon real estate situated like our own, of the occupation of the Union Railway Station, and authorize the Trustees to gratify a request which seems but reasonable, that the first floor should be better adapted to its uses.

For several years past the Society has endeavored to stimulate the introduction of new varieties of PEARS, by offering premiums for the fruit of specified kinds. The cost of a single tree of a new variety is very considerable, while even of *scions* it is by no means trifling. Besides, the cultivator is liable to be imposed upon, having palmed off upon him

spurious or worthless species. A very valuable contribution to our knowledge of varieties is furnished by that eminent orchardist, Mr. John Scott, of Merriott, Somersetshire, England, in an elaborate tabular analysis of Pears which have ripened with him, *upon a light, sandy loam*, during the months of September and October, A. D. 1875. He remarks that only those of first-rate quality are given, adding that it was a very unpropitious year for the ripening of hardy fruits, and "Both size and "flavor are much under what they are in the average of years. All the "sorts enumerated were carefully examined, tested, and proved to be true "to name." At the risk of challenging too much of your attention, I have taken pains to collate from that table, feeling sure that, in common with myself, you will value the experience of an observer so competent, nor esteem it less because obtained without cost. Some varieties are retained, with which we are already familiar, because it is interesting to note how they thrive under the climate of England, "in a light, sandy loam."

This table for October is as follows :

Alexandre Lambré : Second size, rich and delicious, with a fine, honied flavor.

Barry : First to second size, juice excessive, vinous, sugary, deliciously perfumed. Remarkably fine.

Beurré de l' Assomption : First size, juice abundant, acidulated, sugary, and highly perfumed. Remarkably fine.

Beurré Bosc : Second to first size, juice excessive, refreshing, and highly perfumed. Remarkably fine.

Beurré Diel : Second size, sometimes first-rate and often second-rate.

Beurré Hardy : First size, one of our best large pears, juice abundant. Remarkably fine.

Bonne d' Ezeê (miscalled Brockworth Park) : First size, juice very abundant, with an exquisite flavor.

Dix : First size, very juicy, rich, sugary, vinous, and perfumed.

Doyenné (white) : Second to first size, very juicy, aromatic, savory, and delicate.

Emile d' Heyst : Second size, very juicy, acidulated, and refreshing.

Fondante du Comice : First size, very melting and deliciously perfumed. Remarkably fine.

Gen. Todleben : First size, a delicious, melting, and highly perfumed sort. Remarkably fine.

Hovey : First size, melting, sugary, acidulated, juicy, and savory.

Maréchal de la Cour : First size, a delicious pear when grown on the Quince.

Marie Louise : Second to first size, well known to be especially fine from a Quince double-worked. Remarkably fine.

*Orpheline d' Enghien (Glou Morceau) : Second size, very melting, juicy, sugary, and delicately perfumed. Remarkably fine.

Pratt : First size, melting and very delicious here. It is not so in all soils.

St. Michel Archange : First size, very melting, very juicy, perfumed and sugary. Remarkably fine.

Souvenir du Congrés Pomologique : Second to first size, melting, juicy, sugary, rich, and delicious.

Sheldon : Second size, very melting, juice most abundant, sugary, aromatic and delicate. Remarkably fine.

Seckel : Third size, nearly, if not the most delicious of all Pears.

Thompson : Second size, one of the finest Autumn Pears, delicious. Remarkably fine.

Tongrés : First size, a noble and truly delicious, beautiful fruit. Remarkably fine.

Mr. Scott says that the "Early Pears should have preceded the above, "but I had not proved them sufficiently as they ripened. The thought "struck me after I had housed all my fruit and arranged them numeri- "cally. On looking at them I thought I might never have such another "chance of proving them : having before my eyes over 800 sorts, I at "once determined to test every one of them, and the list sent is the best, "or what are considered the superior sorts. I tested many others, but "considered them inferior, and determined to admit only the best. I "know, however, that they will not all be best, in every kind of soil ; "and that many of those I have rejected would prove superior to some "of those enumerated."

This table for November is reproduced in very limited measure :

Althorpe Crassane : Second size, a delicious, hardy, English pear, that bears enormously.

Belle de Noel : Second size, a delicious sort, ripe from October to January,

Bézi Esperen : Second to first size, melting, very juicy, sugary and aromatic.

Beurré Berckmans : Second size, juice excessive, with a delicious and refreshing flavor.

Beurré Delaunoy : First size, melting and delicious, juice plentiful, with a very exquisite flavor.

Beurré Gendron : First size, melting and delicious, ripe from October to June, and resembling Chaumontel in everything but flavor.

[*This Pear would be at least six weeks later in Worcester. But as the Blight bids fair to exterminate the variety, the date of its maturity cannot much matter.—E. W, L.]

Beurré Langelier : Second size, flesh melting, juice abundant and savory.

Beurré Phillippe Delfosse : Second size, very melting, very juicy and sugary, and highly perfumed.

Doyenné du Comice : First size. This is, in my estimation, the finest of all Pears, more especially when grown on the quince stock.

Hébé : First size to very large, flesh fine and very melting, juice abundant, sugary, and very acidulated. I imported this splendid Pear from America in 1870. It was a seedling between Beurré Easter and Duchesse d'Angoulême.

Marshall P. Wilder : First size, flesh very melting and fine, juice excessive, sugary, and deliciously perfumed.

Onondaga : First size, melting, juicy and sugary, but of no great flavor.

Soldat Laboureur : First size, flesh melting, juice excessive and deliciously perfumed.

Van Mons. Leon Le Clerc : First size. One of the finest Pears in cultivation.

Mr. Scott says that he was given "a very carefully selected list of all "the finest November Pears. I have many others that I felt tempted to "give a place in the list, but, having set out with a determination to "eliminate all that did not fully reach the highest grade in quality, I re-"luctantly withheld some kinds that were, by comparison, only a little "lower in the scale than those just named" He also remarks that some, in each of his lists, "will be found to ripen in the month preceding and "succeeding the periods assigned ; i. e., some of the early October sorts "will be ripe in the end of September, and some of the later kinds will "run into November."

Mr. Scott has also furnished a condensed list of the choicest December Pears, as they approve themselves to him after test, upon which, in his judgment, growers may rely with confidence. Among them are the following, more or less familiar to the members of this Society from actual experience or accredited reputation :

Alexandre Lambré : described in November list, but good also for December.

Bergamotte Esperen : Second to first size, very melting, very juicy and delicious. This is, if not the best, at least one of the best Winter Pears. Bézi d'Esperen is often sold for it, but it does not keep so long.

Beurré Bachelier : First size, melting, juice excessive, sugary, delicate, and perfumed.

Beurré Berckmans : First size, very melting, juice excessive, refreshing and delicate.

Beurré Defay : First size, melting, very juicy, sugary, vinous and delicate.

Cadet de Vaux : First size melting, juice excessive, rich and savory. Continues from December to March and sometimes to May.

Comte de Flandres : First size extremely juicy, rich, aromatic, and exquisite.

Doyenné d' Alenčon : Second size, very melting, very juicy, sugary, and aromatic.

Duchesse de Bordeaux : First size, melting, very juicy, refreshing and delicate.

Figue d' Alenčon : First to second size, juicy, buttery, and highly flavored. This delicious Pear requires a warm soil to bring it to perfection.

Graslin : First to second size, very melting, juice excessive, sugary, delicate, and perfumed. M. Decaisne says that this and B. Superfin are the same ; but they are entirely different. One ripe in October, the other in December.

Josephine de Malines : Second to third size, flesh very fine and melting, juice excessive, acidulated, and perfumed. A valuable Pear.

Mariette de Millepieds : First size, flesh very fine and melting, juice excessive, sugary, acidulated and exquisitely flavored, in eating from December to April. A valuable Winter Pear.

Passe Colmar : First to second size, flesh melting and odoriferous, juice excessive, very sugary, vinous and perfumed.

Suprême Coloma ; First size, flesh fine and melting, juice excessive, sugary and delicate. Ripe in November and also delicious in December.

These comprise but a fraction of Mr. Scott's extended list ; but they are are all regarded by him as his "best December Pears." He says that "He always deemed the late Autumn and Winter Pears to be the "most delicious ; they are richer and more aromatic than the early kinds, "which have often nothing to recommend them but their juiciness and "sweetness, although there are a good many exceptions."

Mr. Scott was the first to expose and denounce the attempted fraud of the Brockworth Park. And, although it is doubtful if the tendency among ourselves to limit the list of Pears, whose culture is desirable, can or should be checked, there can be no dispute about the value of an experience based upon the test of a thousand varieties. It is quite likely that none of us may care to try any of the kinds just described, in a "light sandy loam," or upon a hard clay subsoil ; but it is absolutely certain that the sum of our knowledge is just so much augmented by the volume and thorough precision of his practical observations. With each

passing year we are taught, more and more forcibly, how slight is the amount of our positive information. It is but a twelve-month since I confidently asked if any one had ever known the Seckel to be affected by the Blight. Individual experience has already enabled me to answer my own question in the affirmative. If then there is no variety which can be regarded as proof against disease, the main argument in favor of restricting ourselves to the kinds heretofore cultivated loses its whole force. For, in that event there is every inducement to experiment, by cross-fertilization or seedling, until all hope is destroyed; or something is obtained, whose healthy and hardy nature shall prove perfectly satisfactory. If the Seckel, and its like, prove untrustworthy, gone is the theory of Col. Wilder, in favor of depending hereafter upon native varieties. Nature supplies no analogy to warrant a belief in the continued immunity of a species, simply because of its nativity. During the present epidemic in Savannah the black race has not maintained its usual average exemption. Are we not absolutely compelled to fall back upon natural selection, and confessing our own helplessness, to found all our future hopes upon the survival of the fittest? Over and beyond that are the experiments of Mr. Scott, to show what one man has accomplished, and to indicate a path in which others may profitably follow.

The ravages of the Blight during the past season have been general and excessive. As already stated, the Seckel, hitherto considered invulnerable, has succumbed, partially at least, to the attacks of this inexplicable disease. The Louise Bonne de Jersey, one of the hardiest varieties under cultivation, has failed of its usual immunity. Kinds less frequently met with, because of more recent introduction, (the Beurré Superfin for example), have been, in too many instances, literally destroyed. For that *is* destruction which leaves but an unsightly limb or fruitless stump, after long and weary years of patient culture and hope. In the extension or communication of this disease to the Apple, strange as it will seem, may lie our only prospect of discovering a remedy. When the Orchards of the State are in vital danger, the men who have stoutly upheld the supremacy of cider, refusing to mortify the flesh of Massachusetts, may contrive to overcome the inertia of the General Court. Commissions were created, and the medical faculty seriously exercised in an effort, fortunately successful, to stamp out of existence the plague of Pleuro-Pneumonia. The loss of the Fruit trees alone, in the Commonwealth, would not be an insignificant item in the aggregate of its resources. But that loss would be infinitesimal when compared with and weighed against the inappreciable value of the Fruit itself to the enjoyment and actual health of the people. The optimist will say that there is no danger;

pointing to the enormous apple crop of the present year to support his cheerful view. But such crops are terribly exhaustive. Few young orchards are planted, and the complaint is universal that they fail to repay the original cost. Too often are they set out in soil from which every element essential to growth and fecundity was long since eliminated. Oftener than not do they betray some fatal taint of inherited disease, fatal to themselves and infecting all in immediate contiguity : and in the majority of instances they are left to struggle as best they may, without fertilization, their trunks moss-bound and swarming with insects, and with roots either water-logged or parched from careless neglect of mulching. We cannot explain the mystery of their bearing fruit at all. But still less can we account for the persistency with which they yield their harvest, in defiance of such manifold obstacles. Even should the Fruit-crop never totally fail, it cannot be denied that it might be made more perfect. Nor can it be doubted that Science, assured of suitable remuneration for its investigations, could solve most of the problems that now puzzle us, supplying remedies for disease and methods of prevention from insects. Would not such a consummation be of as great benefit to the community as the attempt, hitherto fruitless and always painful to behold, of veteran politicians to be born again !

The disappearance of the QUINCE from the Exhibitions of our Horticultural Societies grows more sadly evident with each recurring year. Some time since it was hoped that its failure might be accounted for by the intense frost that heretofore swept the Cherry from existence. But young bushes succeed no better, apparently lacking vigor to endure even a moderate winter. The cherry trees have been replaced and, when let alone by the Aphis, return a bountiful crop But there seems to be but little constitutional vigor remaining in the Quince. It is rarely seen, save at some old farmstead, where, among weeds and under neglect. it maintains the arduous struggle for an unprofitable existence. Yet it is a fruit of exceeding value for domestic uses, and its cultivation would doubtless repay its successful grower. At present the poorest specimens command Five Dollars per bushel. They must be Apples of unusual excellence which will bring in to their owner One Dollar per barrel. Diversity in the pomological harvest is as indispensable as in the other branches of Terraeculture. The planter who raised nothing but cotton became rapidly impoverished. The orchardist, who grows apples only, has himself to thank for a glutted market and an empty purse.

The Horticulturist has been compelled to wage fierce battle, throughout the past season, with old and new insect foes. The Canker-Worm was quite prevalent and proved constant in his devotion to the

apple and cherry. The inhabitants of cities are personally concerned in this matter; since, in default of the cherry-tree, the Canker-Worm is evidently persuaded that he might go further and fair worse than upon the elm and maple. Could the General Court be induced to grant the petition of the Dedham Fruit-Growers' Association; seconded and enforced as it was by the Massachusetts Horticultural Society; there might be some hope that our orchards would not annually look as though ravaged by fire. The watchful care and intervention of a competent forester, or ranger, clothed with authority to abate, upon private property, that public nuisance to whose existence the owner was indifferent; *and at the expense of such owner;* would supply a speedy and effectual remedy for a growing evil. But, so long as Rusticus is soothed in a morning lullaby, to a lingering nap, by the strident note of the *Turdus Migratorius;* fancying it the strain of an American Nightingale; just so long and with like reason will he tolerate or prolong all other animated existence that is equally useless and destructive. The average Yankee will have his common school. But no law—human or divine, makes it imperative upon him to cultivate common sense:—more s the pity!

In his Annual Report for 1866, your Secretary announced the slow "but "sure advance from the Western States of the Republic, of another "fearful pest—*Doryphora decemlincata*—the ten (10) *lined* spearman; a "new potato-bug. This insect is said to be advancing eastward at the rate "of fifty (50) miles a year." And a hope was expressed that before it reached our border, some easier and quicker method for its destruction might be devised by the scientific skill and practical sagacity of our friends at the West than that of picking off by hand. And again, in 1867:—"The account from the Western States of the destruction caused "by the *Doryphora decemlinacata*, or ten-lined spearman, to the existence "of which insect your attention was invited in the Report of 1866, are "well calculated to awaken increased alarm among cultivators of the "potato. It is astonishing, and would be disgraceful were we authorized "from their past history to expect anything better, that our State So-"cieties and Boards of Agriculture should await, with such stolid indif-"ference, the steady appearance of this pest." These citations, if showing nothing else, at least demonstrate that some of the sentinels upon the watch tower of Horticulture are vigilant and keen to espy the enemy while he is yet afar off. But the Colorado Beetle has arrived, at last, although for the present calendar year only in skirmishing order. During the past season he was apparently occupied in surveying our defences, and *strengthening his own forces*, which last he has a wonderful faculty and facility for doing. And still, all that we are permitted to

hear from our institutions of learning, or men of science, when such imminent danger threatens an important interest of the Commonwealth, is that "State Entomologist (!) Packard discourages the application of "Paris Green, on the ground that it is an expensive and dangerous "poison." The entire State is excited, watching with kindly interest, or pitying curiosity, the frenzied efforts of political parties for reform within themselves. But when the material welfare of the Commonwealth is imperilled, a solitary voice is heard warning the gardener and farmer against the use of a safeguard which has approved itself efficient and innocuous. Universal experience from the Mississippi to the Hudson is contemptuously ignored; and conceited science, as so often before—exclaims in self-complacent serenity—"So much the worse for the facts!"

"The man recovered from the bite.
"The dog it was that died."

The employment of White Hellebore against the Currant-Worm, *Abraxis grossulariata*, was similarly discouraged. Yet man has continued to dust it over his bushes; and life, not death, has been in the breath of his nostrils. Caution is demanded of us in every work of life But we cannot refrain from walking, because we might stumble and fall. Nor should we reject an experience founded upon thousands of actual tests and thoroughly justified by them all.

The extreme and, if tradition can be trusted, Centennial heat to which Massachusetts was subjected during the Summer of 1876, seriously affected the products of our Gardens and Orchards. The season of early fruit was hastened by at least a week, although frequent showers in June measurably promoted and sustained the fecundity of the Strawberry. Of this, plantations had been much winter-killed, owing to the sparseness of snow; yet a propitious Spring renovated the stools and afforded a crop which was perhaps a fair average. But the Drought was extreme at the proper time for the Raspberry to ripen; and some (not wholly unskilled) growers had to content themselves with pints instead of their accustomed pecks. There can be no doubt that the cultivation of the Blackberry by our members has almost wholly ceased, although the discontinuance of our Weekly Exhibitions prevents any positive test of the fact. But the competition with the peach is too much for it; and a temperature of 106° in the shade is oppressive to the man who can only look for a ninepence per quart. A curious fact, corroborating the observations of a few years ago, when the season was very similar, is the effect of such torrid heat upon the Pear. Some of the choicer, thinner-skinned varieties, have proved, when thoroughly matured, to be

utterly destitute of flavor. That superb variety, the Beurrè Bosc, proved mealy, rotted at the core, and every slight defect became a source of rapid decay. And the specimens which turned out so inferior were fully equal to the lot that was honored with your premium at the AUTUMNAL EXHIBITION. The present promise of the Winter Nelis, similarly distinguished, is little if any better.

In the judgement of your Secretary, the earth has never entirely recovered from the protracted drought which necessitated our first pumping experience in this city of Worcester. Deep snows are invaluable, as compared with every other source of supply, and these have not been vouchsafed There have been sudden and violent storms; but frost "held the fort" and the floods were compelled to find vent, sweeping before them the *débris* of dams and the wreck of reputations. Meanwhile evaporation is continuous, and plant and blade and tree absorb at every pore. The "candle burns at both ends." The rootlets will retain every drop that they can intercept; the air will abstract each particle that can be subjected to the mighty attraction of the Sun. At this present writing, could we but count with certainty upon a snowy Winter, we might safely rely upon a permanent change for the better. Frost cannot effectually close a soil so loose and porous. The silent flakes cover and melt into the ground, replenishing exhausted nature in her every vein. Let us remember, if we reluct at clearing sidewalks in the crisp mornings, or find the drifts deep and hard to break through, that it is, after all, but the principle of gravitation which resumes its suspended beneficence, and, if slowly, yet surely, brings apples to our grist.

Some years ago, our late honored associate, John Milton Earle, called your attention to a seedling, russet Pear, originated by himself which, with his consent, was named Earle's Bergamot. At the late AUTUMNAL EXHIBITION, Mr. Velette P. Townsend, of Quinsigamond Precinct, by whom it has been assiduously cherished, placed upon our table some superior specimens. Your Secretary would not intrude upon the province of his accomplished friend, the chairman of the Pear Committee. But he cannot refrain from advising a wider dissemination of this new variety, of local origin, that it may be known if it will preserve its conceded excellence under different conditions. Should it do so, this Society may well felicitate itself upon the acquisition of a memorial of our late associate, more tangible, if less impressive than the speaking likeness which now looks down upon our transactions.

At a meeting of the TRUSTEES, holden on the 10th of February, ult., it was *voted*: "That the Committee on the Library be instructed to pro-"cure, if attainable, an accurate likeness of Hon. Daniel Waldo, our

"earliest benefactor, and suspend the same in Horticultural Hall." Through the kindness of Mrs. Hester Wetherell, the Committee were enabled to make use of a portrait of Mr. Waldo, in her possession, which, if not all that might be desired by those familiar with the benign features of the deceased philanthropist, served as a sufficient groundwork for the very satisfactory work of art that you now behold. Many of you realize that, but for his generous gift, you would scarcely have possessed this valuable property, this Horticultural Library, Hall, and the Furniture indispensable to the use of the latter. For it was bestowed in the infancy of the Society, when a friend in need was a friend indeed. But few of you know, possibly, that he took a deep interest in the formation of the Society, recommending it when others hesitated, and affording a hearty coöperation in aid of the first timid steps. His portrait could nowhere be more at home than here in this Hall of Flora.

It is my earnest trust that you will continue the practice of perpetuating the memory of our benefactors, so happily inaugurated Our first President would fitly grace a vacant panel with his marked lineaments. Nor let us object, should any of those who have followed him, in course, anticipate the action of the TRUSTEES; and, of their own accord and munificence, assume their proper representation upon these walls.

At a meeting of the TRUSTEES, upon the 12th day of February, A. D., 1862, it was voted to remove the Library from the place where it had been so long accommodated, and to locate it permanently in Horticultural Hall. In his Annual Report for the year, dated January 8th, A. D., 1863, your Secretary made the following statement:

"Simultaneous with the removal of the Library and its permanent lo-
"cation in the Hall of the Society, a system of voluntary Weekly Exhibi-
"tions of Flowers and Fruits was commenced, which has been continued
"with marked success to the present day. These Exhibitions, dating
"from the 27th day of February, 1862, sometimes rendered instructive
"by discussions and by the statement of matured experience, were
"almost invariably illustrated by the display and actual trial of a great
"variety of Fruits, whether of the better-known sorts, or of the newer
"and rarer species. Our larger cultivators, from their well-stocked green-
"houses, early afforded lavish exhibitions. A Report which the Secre-
"tary, by some happy chance, was inspired to prepare for the press, first
"attracted public attention; and the visits of those not members, thus
"induced, grew more constant with the steadily augmenting value of the
"Exhibitions."

The interest thus awakened was never suffered to subside. For a period of fifteen years, upon each recurring Thursday, were the members of

the Society, and others inclined to Horticulture, wont to meet together in this Hall. Here, upon well-filled tables, could they find, with invariable assurance, the thoroughly ripened specimens of our larger cultivators heaped up in bounteous profusion. Hither came EARLE and COLTON, GRANT and RIPLEY, with D. WALDO and LEVI LINCOLN, to discuss the comparative or positive merits of varieties, and to impart the conclusions drawn from wide and life-long experience. At these Exhibitions did that skillful orchardist and dilligent seeker after novelties, John C. Ripley, first solicit your attention to such Pears as the Gen. Todleben and Josephine de Malines, with many others of unequal merit. And thus too were you first made acquainted with the Doyenne du Comice and Earle's Bergamot,—the latter, by the way, fast winning for itself a first-class reputation. Hither, too, came Eames, with his Worcester Spy, and Newell Wood with the Red Russett and Stockwell Winter Sweet,—each and all Apples of merit, whose introduction under your auspices tended to fullfil the purposes for which your Charter was obtained,—*to wit:* "Of advancing the Science, and encouraging and improving the Practice "of Horticulture." And when, in later years, the storm and passions of war had drifted, leaving the humaner nature to return to that cultivation of the Earth wherefrom Cincinnatus and Washington were wrested, and to which they so gladly returned,—saviors of nascent and heroic Republics,—it soon became plain that the amenities of life were not absolutely tasteless to those whose more recent walks had been among the wastes of the Cotton-plant and the Rice-field. But cities had enlarged, and towns were grown to cities. The garden and small orchard, surrendered to the carpenter and mason, yielded no longer the usual returns of Triomphe de Gand and Bartlett. Yet, in lieu of them, uprose the conservatory and window garden; and from the limited Eden thereby obtained, the modern Eve, fearless of temptation and exempt from sin, culls as she likes, and as she culls, enjoys. So does the Florist succeed the Pomologist. It may well be doubted if the voluntary display of Fruit within the last few years, had sensibly diminished. But there can be no dispute that the Floral Exhibitions were augmented, to the dullest perception, by the zealous contributions of ladies who were unconsciously instructing themselves in Botany, and developing its rudiments in others. To all who had the welfare of this Society at heart, no more encouraging spectacle could be offered. Frequently something served to provoke investigation,—almost always a rich collection of the useful and beautiful in Nature, to challenge the attention of passing visitors. For many successive years, with monetary rewards too scanty to be considered, were these Floral Displays maintained. And the latest were the most successful, if we are to count for anything the multiplicity of contributors,—of whom a number exhibited a collection or design, for the first time.

All this,—regard it as you choose, either as a school of instruction or a harmless and healthy method of enjoyment,—the Society has deliberately and wantonly forfeited. At an adjourned meeting of the TRUSTEES, on the 2d of December ult., it was decided to substitute for those weekly meetings Two Monthly Exhibitions, in July and August; a schedule of Premiums being arranged for each and admission to both being free. This plan was carried out but partially, as you are all aware. The July Exhibition was precipitated into June, to secure Strawberries and Flowers —the most desirable of which latter, Roses, were even then past redemption. In August there was absolutely nothing left to exhibit. The torrid heat of an unusual Summer had parched foliage and bloom, withering alike germ and fruit. The Raspberry was an utter failure, as a crop, and its scanty yield would have supplied but a meagre basis for a public exhibition. The fact is that there are not enough persons engaged in Horticultural pursuits, in the vicinity of Worcester, to sustain in a proper manner an elaborate monthly exhibition. No schedule of premiums can be framed which will adapt itself to the varying seasons. At the weekly meetings this difficulty could be effectually obviated by authorizing and directing committees to make allowance for specimens of either Flower, or Fruit, that should have been forced into premature development owing to some peculiarity of location and exposure. For two years past the inflexibility of the Rules has worked injustice. The best display of Strawberries, in several varieties, has been excluded from premium because ripened before the absolute date of the exhibition. This was especially noticeable of the Triomphe de Gand, most excellent collections of which superior berry were early developed under conditions that have been deemed wholly unfavorable.

In his Report for the year 1871, Secretary Francis commented upon the error of making the whole interest of the public centre upon a single exhibition. He tersely remarks that "the unavoidable result is a certain "sameness and an old story year after year."

"Can we escape the evil of monotony by changing the season of "the Annual Exhibition? I think not; for during no other week in "the year are the productions of our gardens and orchards so numerous "and varied. The true remedy is to magnify the other Exhibitions "during the year. I am convinced that the horticultural resources of "this vicinity would support, in a highly creditable manner, a series of "weekly Exhibitions on a much larger scale than now, during a "large part of the year, if only sufficient inducements were held to con-"tributors and visitors by a liberal but judicious offer of premiums, by "convenient arrangements in a pleasant room in a suitable location and "by the presence of those known to be able and willing to give infor-

"mation upon subjects connected with that art which our society is "organized to foster. These frequently recurring exhibitions have many "recommendations which are obvious upon the slightest reflection; one "of them only will be alluded to here, namely, that the Annual Exhibi-"tion would naturally be compared, not with its fac simile of the previous "year, but with the smaller and varied displays during the season."

These opinions found acceptance, and for some years thereafter the policy of the Society was in accordance with them. The premiums were augmented, as the means of the Society permitted, and suitable accommodations were provided for all who chose to exhibit, in this Hall of Flora. Your Secretary does not propose to weary your patience by enlarging upon this topic. His last Annual Report dwelt at length upon the advantages of the Weekly Exhibitions. The positive loss enuring to the Society, as a whole, and to its individual members, from the experiment of their discontinuance, confirms his views. He does not believe that the Schedule of 1875 can be materially improved, except as the increase of resources shall permit you to offer greater inducements to contributors. And he would earnestly recommend the adoption of that Schedule of Exhibitions and Premiums, for the Summer of 1877, with only the necessary change of dates. In this way you may revive the interest of cultivators who have been alienated by a sudden, and, as they think, causeless reversal of a time-honored and prosperous policy. Thus, and thereby alone, can you regain the coöperation of ladies, whose zeal and taste, in the past, have contributed so essentially to your success. The benefits of restoring and renewing the mutual intercourse between Town and County, so hardly established and so easily broken, must be plainly evident to all of you by whom they were valued of yore, and to whom their loss has been a source of constant regret during the past year.

The opportunity for the exhibition of new Fruits was not the least of their recommendations. Several kinds, not alone of what are technically known as "Small Fruits," but also of the larger and perhaps choicer genera, could have been shown in their season. Your Secretary might have learned that the Aquilegia Chrysantha, which he had purchased, was, in fact, the Aquilegia Cerulea; and Mr. Salisbury, to whom the latter species was a novelty, would have so much sooner experienced the pleasure of beholding a handsomer variety than the Chrysantha. If there is a time for all things, what can there be better than the *right* time? And of the exact date, each person must be his own judge, carefully watching development and realizing maturity, so that the obvious lesson to himself may be fraught with precious instruction to others. The true horticulturist seeks no concealment; his ways, whether of tentation or

achievement, are plain to all. He asks not for caveat, he solicits no patent. Strangely enough for an American, heis indifferent whether protection shall protect. But do you not owe it to him, within your own limited sphere, to aid him in every possible mode of "advancing the "science and improving the practice of Horticulture?" Of which methods the gratuitous dissemination of precise knowledge is by no means the least.

The indications of a sounder taste in matters of out-door decoration are heartily welcome. How often have we heard a sigh of regret that the English Ivy is not hardy enough to endure our climate, and that *therefore*, the home-porch, or church-wall must be deprived of delicate greenery or grateful shade. Yet all the while, by every corner and nook, and over all our stone fences, trailed a vine incomparably its superior. That this fact is appreciated, at last, is obvious to all who chance to pass by the edifices more recently erected for public worship in this City of Worcester. England, whose zealous and skilled Florists have so developed the latent possibilities of our Azalea and Rhododendron, has not found this American Climber too insignificant to notice. The attention of all who are interested in the more perfect adornment of the sanctuary and the home, is invited to the following concise summary of its merits: "*Ampelopsis Hederacea* (Virginia Creeper): This, which is found wild "over a large portion of Canada and the United States, is a vigorous "deciduous climber—reaching sometimes heights of from forty to fifty "feet. With large digitate leaves of a warm, green color, in early Sum-"mer, but changing in the approach of Autumn to a bright red, giving "the plant at that season a peculiarly grand appearance, amply compen-"sating for its small, inconspicuous flowers, which, being of greenish "white, are not of themselves attractive. This shrub is one of the most "ornamental of hardy climbers, unrivalled for covering walls and houses, "to which it clings closely and firmly with no other aid than that of its "tendrils; and that few plants withstand the dust and smoke of "towns so well is proved by the frequency with which it is to be seen "growing and even thriving, on windows and balconies in the most "crowded thoroughfares, with no other soil than that afforded by a "shallow box, or moderate sized flower pot. In order to keep it tidy, it "should be trimmed or pruned annually, the best time for the operation "being in Spring, before it begins to grow." This last suggestion of the *Garden* can be fully endorsed by your Secretary, from his personal observation and trial. No one who has not tested it can have any idea of the advantages of close pruning. Whether it would be as beneficial to the newly introduced varieties from Japan—to the *Ampelopsis Veitchii*—can only be learned from actual experience. But, at any rate, let us hope that this graceful and thrifty climber may shortly be made to

conceal the myriad rocks and stumps which, far from disfiguring, would then beautify the landscape.

Your Secretary is happy to congratulate you upon the success of the late ANNUAL AUTUMNAL EXHIBITION. The display was of unusual excellence in many departments, and in but few was inferiority unpleasantly evident. The arrangement of the Plants was in the happiest taste, being charmingly adapted to the form of the Hall of Pomona, and at the same time suiting the convenience of visitors. And these latter, by the way, were especially numerous. Prominent among them was His Excellency Gov. Rice, who was profuse of compliment, remarking with evident sincerity that he was wholly unaware that Worcester County could hold such an exhibition, and that he should have been sorry indeed had he failed to see it. Mr. A. W. Cheever of the N. E Farmer, writes concerning it, that "Having an hour to spare on Thursday evening, we took "a look at the bountiful collection of fruits and vegetables, and the "beautiful display of flowers and green-house plants. Of the latter, the "President, Mr. Merrifield, had a large collection on the tables, including "many that are both rare and beautiful. The arrangement of the fruits "on the tables is a new one to us, but we believe is being adopted by "other Societies. No premiums are offered for best collections, but each "variety of fruit or flower is shown by itself, where the eye can, at a "glance, see which are the most superior. This gives the visitor a much "better opportunity to study varieties, than when they are scattered all "over the Hall.

"The show of Apples is said to be one of the finest ever made by the "Society. There are some two hundred plates shown by about forty ex-"hibitors. Of Pears, there were three hundred plates, from over fifty "exhibitors, but of Quinces, there were but four plates shown. This "Fruit, which was formerly as cheap as Apples, seems yearly to grow "more and more difficult to cultivate successfully, and the few bushels "which are now found in our markets, bring quite extravagant prices. "The exhibition of flowers was beautiful, but far beyond our power of "description.

"The Horticultural Society during its long period of existence, has "done a vast amount of good to the people of Worcester and the sur-"rounding towns, by creating or stimulating a taste for improving and "beautifying the homesteads and public grounds in and around the City, "It has also encouraged the culture of Fruit and Flowers to an incalcu-"lable degree, but there is still work enough ahead, to require its influ-"ence for many a year yet to come. The great mass of people have "hardly, as yet, begun to realize the value of choice Fruits as a constant "accompaniment to the family table, or of the refining influence which

"Flowers exert upon the mind and character, both of the young and old."

The mention by Mr. Cheever of our "system of arrangement" renders it not improper to state that the system, so happily approved by us, has commended itself to the Massachusetts Horticultural Society, and has, within the last year, been adopted by that venerable but wide-awake organization. That Society has also viewed, with favor, our method of designating varieties, and compliments us by requesting specimens to be used as models. In these facts may be found some slight excuse, for those of us who, acknowledging our provincialism, yet fail to envy others of superior leisure or better fortune, whose natural rusticity has taken such dazzling lustre from a casual metropolitan intercourse. If our light was not set upon a hill, neither has our talent been hidden in a napki and buried in the ground.

The imperative need of greater precision in Nomenclature is constantly claiming attention. Species are often displayed upon our tables,—not infrequently by the same grower,—which have no points of dissimilarity save the name. Among the Small Fruits, by which designation Berries of all kinds are understood to be included, this has been a source of serious trouble. In his Report for 1873, your Secretary remarked upon one feature of a Summer Exhibition, that—

"Too many of the lots of Currants were untrue to the accredited traits of "the alleged varieties. Thus La Versaillaise, which has no especial charac- "teristic, if not its long clusters, was misrepresented by stems bearing "at least but five or six berries. The most experienced cultivators in- "cline strongly to the opinion that the distinction between the Cherry "and La Versaillaise is without a difference. But what if growers are "not even careful to maintain a distinction? So, too, of the White vari- "eties. There were displayed during the past Summer, boxes of White "Dutch, White Gondouin, and White Grape; of very great similarity in "appearance; and between which it would not be desirable to preserve "any line of demarcation, unless elements of superiority are more obvi "ous than was the case on the 17th of July. It is noteworthy that one "noble box of Red Dutch surpassed in size its fashionable and modern "rivals, as it notoriously does in flavor whenever and wheresoever put in "competition."

Among the manifold services rendered to mankind by the Royal Horticultural Society of England, in whose recent unmerited misfortunes all Horticulturists can but feel profound sympathy; none are greater, if some have been more conspicuous, than the Experimental Trials of varieties of Vegetables and Fruits, instituted and carried out under its auspices. At one time every known kind of Potato has been collected from far and near, from the continents of Europe and America, and from the

isles of the sea, and subjected to cultivation, side by side, under the daily and close inspection of the appointed officers of the Society. Again, the different sorts of Peas, of which vegetable the fecundity in England seems something astonishing in its Protean shapes, are compelled to submit to a similar crucial test. Of course it is not expected that results thus obtained would be the same under different treatment and in dissimilar soils. But imposture is detected, and the *Purity of Varieties* maintained for the benefit and protection of honest gardeners.

Mr. A. F. Barron, in his Report upon the Red and White Currants, fruited at Chiswick, in the Gardens of the Royal Horticultural Society, A. D. 1875, demonstrates the soundness of the position so early assumed and invariably upheld by your Secretary in his annual reports. "Names," he says, "exist in plentiful variety, but the fruits of all the kinds are very "similar, so that it has been impossible to distinguish them The varie- "ties may vary to some extent, as to the size of the bunches, berries, "their color, cropping qualities, &c., but as these are considerably affected "by cultivation, situation, &c., their comparative and distinctive "merits can only be ascertained when all the varieties are grown to- "gether under the same conditions, as in the present instance. The "collection, consisting of forty-five (45) reputed distinct varieties, was "got together from various quarters, and represents most of the names "to be met with in English nurseries, and a few of the French. Altogether "there exist about sixty (60) distinct names as applied to the Red Currant "and about fifteen to the White, so that the remainder have to be col- "lected and described." Basing the classification chiefly on the "appear- "ance of the plants, their foliage, habit of growth, &c., which is very de- "cided, distinct, and easily to be recognized," he concludes that there "is "no means of distinguishing any of the varieties by their fruit alone."

At Chiswick the Gloire des Sablons proved the same as the Gondouin. The Red Cherry turned out to be identical with La Versaillaise, as your Secretary always contended was the fact. But the neatest example of the havoc which continued and exact experiment can make with pomological imposture is submitted, without abridgement, as follows:

"Red Dutch:—(Synonyms—Fertile, Fertile d'Angleterre, Fertile "d'Palluau, Fertile de Bertin, La Hâtive, Hâtive de Bertin, Bertin No. "9, Belle de St. Gilles, Chenonceaux, Grosse Rouge de Bologne, Queen "Victoria, Red Grape.")

"This is one of the best varieties in cultivation—a most abundant "bearer and ripening early. The bunches are long and the berries large, "full and juicy, of a bright red color. The plant is of a dwarf and some- "what slender habit of growth, never attaining a large size. The leaves "broad and flat, deep green, having a sort of metallous glaucous hue,

"which renders it in appearance quite distinct. The synonyms here given "are all referrable to this one variety, and which is the one generally "grown, and known in this country as the Red Dutch."

How many of our own growers have been robbed of money and time by this disguise of an old favorite variety under a new and sonorous name!

The official position which he now occupies, has been held by your Secretary, with scarcely an intermission, for half a generation. Within that period the Society has undergone many changes. Few remain of the familiar faces that he was accustomed to see at the Annual or Weekly Meetings. Many have fallen like the leaves of Autumn, while others were snatched prematurely away from a happy and useful existence. Some have ceased to feel the interest in Horticulture that they experienced in more youthful days, leaving it to those of us, who regard it as the bounden duty of some one, to bear the burden that has been lifted from their shoulders. And, even to us, the task may, at times, appear monotonous. But so is all duty, which, nevertheless, must be discharged. We can only do what lies in our power, feeling assured that no well-meant effort for the benefit of our kind is ever lost, and finding consolation, amid neglect or indifference, in the knowledge that no selfish or corrupt ambition has inspired or directed our labors. What aim those labors should take has been suggested, even to wearisomeness, in these Reports. Their proper direction, as apparent to others, was never more clearly set forth than in the *Gardener's Chronicle*.—so long the mouthpiece and organ of the lamented Lindley :—

"But apart from mere trade interests, what the Horticulturists want, "and what a Horticultural Society should supply them with, is a central "association which should promote the introduction and display of new, "and of improved varieties of old Plants, whether useful or ornamental, "which should carry on independent experimental trials to test the value "of new introductions, which should undertake experimental observa-"tions in Vegetable Physiology, and other branches of Science of cardi-"nal importance to the interests of Horticulture, but which are of such a "nature that no private individual, and especially no one who has his "commercial interests to consider, could do for himself. It should keep "before the public the dignity of Horticultural pursuits, demonstrate "their importance as a branch of experimental science, and bring home "to those who only look at matters from a £ s. d. point of view, the im-"mense national and financial importance of Horticultural Science, when "properly directed and applied to the relief of man's estate and the en-"hancement of his nobler faculties."

Which is all respectfully submitted, by

EDWARD WINSLOW LINCOLN,

Secretary.

HORTICULTURAL HALL, November 1, A. D., 1876.

OFFICERS AND COMMITTEES

OF THE

Worcester County Horticultural Society,

FOR THE YEAR 1877.

PRESIDENT.

WILLIAM T. MERRIFIELD, of Worcester.

VICE PRESIDENTS.

STEPHEN SALISBURY, of Worcester; PHILIP L. MOEN, of Worcester; O. B. HADWEN, of Worcester.

SECRETARY.

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER.

JOHN CALVIN NEWTON, of Worcester.

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Isaac Davis,	"	D. Waldo Lincoln,	"
George E Francis,	"	Edward Earle,	"
James F. Allen,	"	Henry Phelps,	"
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Thomas M. Lamb,	"	Jonathan Forbush,	Bolton
Frank J. Kinney,	"	Newell Wood,	Millbury
Alfred Davis,	"	F. M. Marble,	Grafton
Emory Banister.	"	Jos. C. Lovell,	West Boylston

STANDING COMMITTEES.

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ON LIBRARY AND PUBLICATION.

Edward W. Lincoln, George E. Francis, William T. Harlow.

ON NOMENCLATURE.

James F. Allen, Henry Phelps, George E. Francis,

ON ARRANGEMENTS AND EXHIBITIONS.

J. C. Newton, *Chairman*, Samuel Flagg, William H. Earle,
George E. Francis, James Draper, William T. Merrifield, *Pres.*
Henry L. Parker, Henry Phelps, Edward W. Lincoln, *Sec'y*,

Nos. 5 Oak and 18 Front Streets.

☞ The AUTUMNAL EXHIBITION will open at 6 o'clock P. M., on Wednesday, September 19th, and close on Friday, September 21st, at 8.30 o'clock P. M.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1877.

☞ The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

WORCESTER, MASS.:
PRINTED BY EDWARD R. FISKE, MECHANIC STREET.
1877.

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COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

JOHN C. NEWTON, *Chairman.*
GEORGE E. FRANCIS,
SAMUEL FLAGG,
JAMES DRAPER,
HENRY PHELPS,
WILLIAM H. EARLE,
HENRY L. PARKER,

WM. T. MERRIFIELD, *President.*

EDWARD W. LINCOLN, *Secretary,*
Nos. 5 Oak and 18 Front Streets, Worcester.

The Autumnal Exhibition commences on Wednesday, September 19th, at 6 P. M , and closes on Friday, September 21st, at 8.30 P. M.

COMMITTEES OF AWARD.

APPLES.—WILLIAM T. HARLOW, *Chairman;* James F. Allen, Samuel A. Knox, Rufus Woodward, of *Worcester;* and John L. Brown, of *Lunenburg.*

GRAPES, PEACHES, &c.—WILLIAM H. EARLE, *Chairman;* T. M. Lamb, Charles Goodwin, of *Worcester;* George Cruickshanks, of *Whitinsville;* and F. M. Marble, of *Grafton.*

PEARS.—HENRY L. PARKER, *Chairman;* Henry Phelps, John C. Newton, James Draper, of *Worcester;* and Newell Wood, of *Millbury.*

PLANTS, FLOWERS, &c.—SAMUEL FLAGG, *Chairman;* George E. Francis, Clarendon Harris, D S. Messinger, and Henry L. Shumway, of *Worcester.*

VEGETABLES.—ALEXANDER MARSH, *Chairman;* Thomas R. Norcross, J. D. Lovell, Charles Belcher, and William H. Hackett, of *Worcester.*

☞The Committees will meet at 9 o'clock on the morning of Thursday, September 20th, to determine the awards.

SUMMER EXHIBITIONS.

The Opening Exhibition of the Summer Season will be held in the HALL OF FLORA, on Thursday, the 14th day of June, from 3 to 5 o'clock P. M.

SPECIAL NOTICE:

The Rules and Regulations require that correct and legible names shall be attached to each and every plant or flower entered in a class of named varieties; and that written lists of the same shall be given to the Secretary.

Strict compliance with the Rules and Regulations, to be found on pages 11–13, is required on the part of Contributors and Committees.

ON THURSDAY, JUNE 14TH.

HARDY PLANTS AND SHRUBS.

For the best display of cut flowers, varieties with names attached	$5 00
For the second best	3 00
For the third best	2 00

ON THURSDAY P. M., JUNE 21ST.

CUT FLOWERS.

For the best display	$2 00
For the second best	1 00

ROSE EXHIBITION.

The Annual Rose Exhibition will be held in the HALL OF FLORA, on Thursday, the 28th day of June, commencing at 3 P. M., and closing at 5 P. M.

All articles for competition must be entered with the Secretary, and be placed on the tables, before 1 o'clock P. M.

GARDEN ROSES.

For the best general display of varieties with names attached	$5 00
For the second best	3 00
For the third best	2 00
For the best arranged vase	2 00
For the second best	1 00

CUT FLOWERS.

For the best collection	3 00
For the second best	2 00
For the third best	1 00

TO FLORISTS.

On Thursday, July 5th, and on each successive Thursday, viz. :

July 11th,	August 9th,	September 6th,
July 19th,	August 16th,	September 13th,
July 26th,	August 23d,	
August 2d,	August 30th,	

Premiums of two dollars ($2.00) and one dollar ($1.00) respectively, will be offered for the best, and next best ONE STAND OF CUT FLOWERS.

All Exhibitors limited to one stand.

Premiums for rare and new plants to be awarded only to those exhibited for the first time in Worcester.

PREMIUMS FOR FRUITS DURING THE SEASON.

☞The Season is understood to extend from the opening in June to the Autumnal Exhibition in September, during which there will be an Exhibition every Thursday, and premiums will be awarded as enumerated in the Schedule.

No person can compete for more than one premium with the same species of Berry or variety of Fruit. All *Small Fruits* must be displayed in quart boxes.

STRAWBERRIES.

☞Entries must be made with the Secretary, and the articles be upon the tables before 1 o'clock P. M.

PREMIUMS.

For the best quart of Boyden No. 30	$ 1 00
For the best quart of Charles Downing	2 00
For the second best quart of Charles Downing	1 00
For the third best quart of Charles Downing	50
For the best quart of Col. Cheney	1 00
For the best quart of Monarch of the West	2 00
For the second best quart of Monarch of the West	1 00
For the best quart of Jucunda	2 00
For the second best quart of Jucunda	1 00
For the third best quart of Jucunda	50
For the best quart of Kentucky	1 00
For the best quart of Lady of the Lake	1 00
For the best quart of Triomphe de Gand	1 00
For the second best quart of Triomphe de Gand	50
For the best quart of Wilson	2 00
For the second best quart of Wilson	1 00
For the third best quart of Wilson	50
For the best quart of any other variety	1 00
For the best two quarts in the Exhibition	2 00

The sum of $6.00, placed in hands of the Committee, may be awarded for varieties not in the Schedule.

☞A premium of $2.00 is offered by Mr. O. B. Hadwen for the best fifty berries (flat) of any variety.

On THURSDAY, JULY 5th.

CHERRIES.

For the best two quarts of Black Tartarian	$ 2 00
For the second best two quarts of Black Tartarian	1 00
For the best two quarts of any other named Black variety	1 00
For the best two quarts of any named White variety	2 00
For the second best two quarts of any named White variety	1 00
For the best two quarts of any named Red variety	2 00
For the second best two quarts of any named Red variety	1 00

On THURSDAY, JULY 12th.

CURRANTS.

For the best two quarts of La Versaillaise	$ 2 00
For the best one quart of La Versaillaise	1 00
For the best quart of Red Dutch	1 00
For the second best quart of Red Dutch	50
For the best quart of Dana's Transparent	1 00
For the best quart of White Gondouin	1 00
For the best two quarts of White Grape	2 00
For the best one quart of White Grape	1 00

On THURSDAY, JULY 19th.

RASPBERRIES.

For the best two quarts each of three named varieties	$ 3 00
For the best two quarts of Brinckle's Orange	2 00
For the second best two quarts of Brinckle's Orange	1 00
For the best two quarts of Northumberland	2 00
For the second best two quarts of Northumberland	1 00
For the best two quarts of Hudson River Antwerp	2 00
For the second best two quarts of Hudson River Antwerp	1 00
For the best quart of Clarke	1 00
For the best quart of Franconia	1 00
For the best quart of Knevett's Giant	1 00
For the best quart of Philadelphia	1 00

BLACK CAPS.

For the best quart of Davison's Thornless..... 1 00
For the second best quart of Davison's Thornless..... 50
For the best quart of Doolittle 1 00
For the second best quart of Doolittle..... 50
For the best quart of Mammoth Cluster..... 1 00
For the second best quart of Mammoth Cluster..... 50

On THURSDAY, JULY 26TH.

RASPBERRIES.

For the best two quarts of any named variety.....$ 2 00
For the second best..... ... . 1 00

BLACKBERRIES.

For the best quart of Kittatinny.... .... 1 00
For the second best quart of Kittatinny..... 50
For the best quart of Wachusett..... ..... 1 00
For the second best quart of Wachusett..... 50

On THURSDAY, AUGUST 2ND.

PEARS.

For the best ten specimens of Doyenné d 'Eté.....$ 1 00
For the best ten of any other variety..... 1 00

POTATOES.

For the best peck (new)..... 1 00

TOMATOES.

For the best twelve specimens (open culture)..... 2 00
For the second best (open culture)..... 1 00

On THURSDAY, AUGUST 9TH.

APPLES.

For the best ten specimens of any named variety.....$ 2 00
For the second best ten specimens of any named variety..... 1 00

PEARS.

For the best ten specimens of Beurre Giffard..... 2 00
For the second best..... 1 00
For the best ten of any other named variety..... .... 1 00

On THURSDAY, AUGUST 16TH.

APPLES.

For the best ten specimens of Early Sweet Bough..... ....$ 1 00
For the best ten specimens of Williams' Early Red..... 1 00
For the best ten specimens of Red Astrachan.... .... 2 00
For the second best ten specimens of Red Astrachan..... 1 00

PEARS.

For the best ten Rostiezer..... ..... 1 00
For the best ten of any other named variety..... ..... 1 00

On THURSDAY, AUGUST 23RD.

APPLES.

For the best ten specimens of any named variety.....$ 1 00
For the best ten of any other named variety..... 1 00

PEARS.

For the best ten specimens of any named variety..... 1 00
For the best ten of any other named variety..... 1 00

On THURSDAY, AUGUST 30TH.

APPLES.

For the best ten specimens of any named variety.....$ 1 00
For the best ten specimens of any other named variety..... 1 00

PEARS.

For the best ten specimens of Clapp's Favorite..... 1 00
For the best ten specimens of any other named variety..... 1 00

PEACHES.

For the best ten specimens of Crawford's Early.... . ..... 2 00

VEGETABLES.

For the best twelve Tomatoes..... 2 00
For the second best..... 1 00

On THURSDAY, SEPTEMBER 6TH.

APPLES.

For the best ten specimens of any named variety.....$ 2 00
For the best ten specimens of any other named variety..... 1 00

PEARS.

For the best ten specimens of Clapp's Favorite	2 00
For the second best	1 00
For the best ten specimens of Bartlett	2 00
For the second best	1 00

PEACHES.

For the best dish of ten specimens	2 00
For the second best	1 00

On THURSDAY, SEPTEMBER 13th.

APPLES.

For the best ten specimens of Red Astrachan	$ 1 00
For the best ten specimens of Early Williams	1 00
For the best ten specimens of Early Sweet Bough	1 00
For the best ten specimens of Duchess of Oldenburg	1 00

PEARS.

For the best ten specimens of Dearborn's Seedling	1 00
For the best ten specimens of Beurre de 'l Assomption	1 00
For the best ten specimens of Flemish Beauty	1 00
For the best ten specimens of Belle Lucrative	1 00

PEACHES.

For the best ten specimens of a named variety	2 00
For the second best ten specimens	1 00

VEGETABLES.

For the best twelve Tomatoes	2 00
For the second best twelve Tomatoes	1 00

At these Summer Exhibitions the Standing Committee on Flowers, Plants, &c., &c., will serve.

The Committee on Fruits, &c., &c., will consist of Messrs. Henry Phelps, James Draper, John C. Newton, George Cruickshanks, of *Whitinsville*, and the Secretary.

In order to afford the Committees an opportunity to examine and report on the articles exhibited, no other person can be admitted to, or remain in the Hall, between the hours of one (1) and three (3) o'clock on the days of the Exhibitions.

AUTUMNAL EXHIBITION.

THE SOCIETY will hold its ANNUAL AUTUMNAL EXHIBITION, A. D. 1877, in its own Halls, on Front Street, in the City of Worcester.

The Exhibition will commence on Wednesday, September 19th at 6 o'clock P. M., and close on Friday, September 21st, at 8½ o'clock P. M.

☞ Exhibitors are notified that strict conformity to the Regulations and Rules will be expected and required, for their own benefit as well as for the convenience of the Officers of the Society.

☞ Particular attention is called to the Rules and Regulations on pp. 11–13, and especially to Nos. 1 and 17, respectively; the one defining the limit of time for entries of Vegatables, and the other requiring lists of all entries to be filed with the Secretary.

RULES AND REGULATIONS.

1. Articles offered for premium at the AUTUMNAL EXHIBITION must be in the Halls and entered with the Secretary before four (4) o'clock P. M., of the opening day of the Exhibition; *provided*, that all entries of Vegetables for the Exhibition must be made with the Secretary *before* 6 o'clock P. M., on the 15th day of September.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester.*

3. After the articles are arranged they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove* them, until the Exhibition is closed, when they will be delivered as the contributors may direct.

4. No person shall be entitled to receive more than one premium for the same specimen, and no article for which a premium has been once awarded can receive another during the season.

5. No cards of a business nature will be allowed in any Exhibition.

6. Where a certain number or quantity of Plants, Flowers, Fruits, or Vegetables, is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

7. It will be the duty of the Committees to *exclude from exhibition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste.

8. The Committees have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary, by giving seasonable notice thereof.

9. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables under different names; or exhibiting, as grown by himself, Fruit or Vegetables grown by another, thereby violating the objects and rules of the Society; shall be debarred from competing for the Society's premiums until re-instated.

10. No Flowers, Plants, Fruits or Vegetables will be entitled to a premium unless they possess points of superiority; and the Committees are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them.

11. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens for trial and examination, if requested.

12. No member of any of the Committees for awarding premiums or gratuities shall, in any case, vote or decide respecting an award for which such member may be a competitor, or therein have an interest; but in such case such member shall temporarily vacate his place upon the Committee, the vacancy for the time being to be supplied by the remaining members of the Committee

13. All premiums that are not claimed within three months after the Autumnal Exhibition shall be forfeited to the Society.

14. The awards of the premiums will be made known as soon as the premium cards can be filled out and placed upon the tables.

15. Admission to the Autumnal Exhibition, for those who are not members of the Society, 15 cents; children under sixteen years of age, 10 cents; packages of five (5) tickets, 50 cents.

16. All Fruits and other articles to be designated at the time of entry, if they are to be reserved; and all fruits and other articles not so re-

served at the time of entry, will be arranged by the Committee on Friday evening at the close of the Exhibition, at 8.30 o'clock, and sold at auction for the benefit of the Society.

17. *Contributors will be required to furnish the Secretary with a list of their articles.*

18. "Downing's Fruits of America," revised edition, will guide the Committees in their decisions upon matters at issue.

☞SPECIAL NOTICE.—The several Committees will meet at 9 o'clock A. M., Thursday, to make their awards.

Reports of the several Committees on Premiums are to be made in the Hall, on Thursday evening at 8 o'clock, and the premium cards will be placed upon articles receiving premiums immediately thereafter.

PREMIUMS.

AUTUMNAL EXHIBITION.

APPLES.

COMMITTEE. — Wm. T. Harlow, *Chairman;* James F. Allen, Rufus Woodward, Samuel A. Knox, of *Worcester;* and John L. Brown, of *Lunenburg.*

☞The Committee will meet at 9 o'clock on Thursday morning, September 20th, to determine the awards.

For the best ten Astrachan (Red)	$ 2 00
For the second best	1 50
For the third best	1 00
For the best ten Baldwin	2 00
For the second best	1 50
For the third best	1 00
For the best ten Cogswell	2 00
For the second best	1 50
For the third best	1 00
For the best ten Duchess of Oldenburg	2 00
For the second best	1 50
For the third best	1 00
For the best Foundling	2 00
For the second best	1 00
For the best ten Golden Sweet	2 00
For the second best	1 50
For the third best	1 00

For the best ten Gravenstein	2 00
For the second best	1 50
For the third best	1 00
For the best ten Holden Pippin	2 00
For the second best	1 50
For the third best	1 00
For the best ten Hubbardston Nonesuch	2 00
For the second best	1 50
For the third best	1 00
For the best ten Leicester Sweet	2 00
For the second best	1 50
For the third best	1 00
For the best ten Lyscom	2 00
For the second best	1 50
For the third best	1 00
For the best ten Maiden's Blush	2 00
For the second best	1 50
For the third best	1 00
For the best ten McClellan	2 00
For the second best	1 00
For the best ten Mother	2 00
For the second best	1 50
For the third best	1 00
For the best ten Northern Spy	2 00
For the second best	1 50
For the third best	1 00
For the best ten Peck's Pleasant	2 00
For the second best	1 50
For the third best	1 00
For the best ten Porter	2 00
For the second best	1 50
For the third best	1 00
For the best ten Rhode Island Greening	2 00
For the second best	1 50
For the third best	1 00
For the best ten Roxbury Russet	2 00
For the second best	1 50
For the third best	1 00
For the best ten Sweet Bough (Early)	2 00
For the second best	1 50
For the third best	1 00

For the best ten Sutton Beauty..... 2 00
For the second best..... 1 00
For the best ten Taliman's Sweet..... 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Twenty Ounce..... 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Washington Royal..... 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Washington Strawberry..... 2 00
For the second best..... 1 50
For the third best..... 1 00
For the best ten Williams' Early Red..... 2 00
For the second best..... 1 50
For the third best..... 1 00

The sum of $10.00 is placed at the disposal of the Committee for Gratuities for varieties not named in the list, under the same restrictions as limit Gratuities for Pears.

GRAPES, PEACHES, &c.

COMMITTEE—William H. Earle, *Chairman;* Thomas M. Lamb, Chas. Goodwin, of *Worcester;* George Cruickshanks, of *Whitinsville;* and F. M. Marble, of *Grafton.*

☞ The Committee will meet at 9 o'clock on Thursday morning, September 20th, to determine the awards.

GRAPES.

For the best collection of not less than six named varieties grown under glass, two clusters of each variety.....$10 00
For the second best..... 7 00
For the third best..... 5 00
OPEN AIR.—For the best four clusters of Concord..... 2 00
For the best four clusters of Delaware..... 2 00
For the best four clusters of Diana..... 2 00
For the best four clusters of Hartford Prolific..... 1 00

For the best four clusters of Iona	2 00
For the best four clusters of Rogers No. 3, (Massasoit)	2 00
For the best four clusters of Rogers No. 4, (Wilder)	2 00
For the best four clusters of Rogers No. 9, (Lindley)	2 00
For the best four clusters of Rogers No. 15, (Agawam)	2 00
For the best four clusters of Rogers No. 19, (Merrimac)	2 00
For the best four clusters of Salem	2 00
For the best four clusters of Worden	2 00
For the best four clusters of Martha	2 00
For the best four clusters of any other named variety	2 00
For the second best four clusters of any other named variety	1 00

PEACHES.

For the best collection of six named varieties, not less than ten specimens each	6 00
For the second best	4 00
For the third best	2 00
For the best three named varieties of ten specimens each	3 00
For the second best	2 00
For the best one named variety of ten specimens	2 00
For the second best	1 00
For the best ten specimens of any other named variety	1 00

PLUMS.

For the best collection of not less than four named varieties	3 00
For the second best	2 00
For the best three varieties	2 00
For the second best	1 00
For the best single plate	2 00
For the second best	1 00

QUINCES.

For the best ten Orange Quinces	3 00
For the second best	2 00
For the best ten Quinces of any other kind	2 00

A sum not exceeding $6.00 is placed at the disposal of the Committee for Gratuities for varieties not named in the list, with the same restrictions as on Pears.

CRAB APPLES.

For the best display	$ 3 00
For the second best	2 00
For the best dish of twenty-four specimens of any named variety	2 00
For the second best	1 00
For the best 24 Hyslop	2 00
For the best 24 Transcendent	2 00

PEARS.

COMMITTEE—Henry L. Parker, *Chairman;* Henry Phelps, John C. Newton, James Draper, of *Worcester;* and Newell Wood, of *Millbury.*

☞ The Committee will meet at 9 o'clock on Thursday morning, September 20th, to determine the awards.

☞ All plates of Pears will contain TEN, instead of TWELVE as last year.

CLASS 1.—

For the best ten Bartlett	$ 3 00
For the second best	2 00
For the third best	1 00
For the best ten Belle Lucrative	2 00
For the second best	1 00
For the best ten Beurre Bosc	3 00
For the second best	2 00
For the third best	1 00
For the best ten Beurre Clairgeau	1 00
For the best ten Beurre d'Anjou	3 00
For the second best	2 00
For the third best	1 00
For the best ten Beurre Diel	2 00
For the second best	1 00
For the best ten Beurre Hardy	2 00
For the second best	1 00
For the best ten Beurre Langelier	2 00
For the second best	1 00
For the best ten Beurre Superfin	3 00
For the second best	2 00
For the third best	1 00

For the best ten Dix	1 00
For the best ten Doyenné Boussoc	2 00
For the second best	1 00
For the best ten Doyenné du Comice	3 00
For the second best	2 00
For the third best	1 00
For the best ten Duchesse d'Angoulême	3 00
For the second best	2 00
For the third best	1 00
For the best ten Durandeau	2 00
For the second best	1 00
For the best ten Flemish Beauty	2 00
For the second best	1 00
For the best ten Goodale	2 00
For the second best	1 00
For the best ten Glou Morceau	2 00
For the second best	1 00
For the best ten Howell	2 00
For the second best	1 00
For the best ten Josephine de Malines	2 00
For the best ten Lawrence	3 00
For the second best	2 00
For the third best	1 00
For the best ten Louise Bonne de Jersey	3 00
For the second best	2 00
For the third best	1 00
For the best ten Mt. Vernon	2 00
For the second best	1 00
For the best ten Marie Louise	2 00
For the second best	1 00
For the best ten Onondaga	2 00
For the second best	1 00
For the best ten Paradis d'Automne	2 00
For the second best	1 00
For the best ten Seckel	3 00
For the second best	2 00
For the third best	1 00
For the best ten Sheldon	3 00
For the second best	2 00
For the third best	1 00
For the best ten St. Ghislain	2 00
For the second best	1 00

For the best ten St. Michel	1 00
For the best ten St. Michel Archange	2 00
For the second best	1 00
For the best ten Urbaniste	2 00
For the second best	1 00
For the best ten Vicar of Winkfield	2 00
For the second best	1 00
For the best ten Washington	2 00
For the second best	1 00
For the best ten Winter Nelis	3 00
For the second best	2 00
For the third best	1 00

CLASS 2. (New Pears.)

For the best ten Beurre de l' Assomption	1 00
For the best ten Souvenir du Congrés	1 00
For the best ten Duchesse de Bordeaux	1 00
For the best ten Dr. Reeder	1 00
For the best ten Helene Grégoire	1 00
For the best ten Huyshe's Prince Consort	1 00
For the best ten Rutter	1 00
For the best ten Emile d' Heyst	1 00
For the best ten Doyenné Hovey	1 00
For the best ten Souvenir d' Esperen	1 00
For the best ten Gen. Todleben	1 00
For the best ten Duc de Bordeaux	1 00
For the best ten Beurre Delaunoy	1 00

A premium of $10.00 is offered for the best 15 varieties of Pears, and of $5.00 for the second best 15 varieties, by Messrs James Draper and Wm. H. Earle.

The sum of $10.00 is placed at the disposal of the Committee to be used in Gratuities for varieties not mentioned in the above list, if in their judgment, the varieties are entitled to it; but in no case shall a gratuity be given to a variety named in the list, which was entered for premium and failed to get an award.

PLANTS, FLOWERS, &c.

COMMITTEE.—Samuel Flagg, *Chairman;* George E. Francis, Clarendon Harris, David S. Messinger, and Henry L. Shumway, of *Worcester.*

☞The Committee will meet at 7 o'clock on the evening of Wednesday, September 19th, being the opening evening of the Exhibition, to determine the awards.

[RULE: All Pot-Plants shall have been grown in the Pots in which they are exhibited.]

ASTERS.—

For the best display (one stand)	$ 4 00
For the second best	3 00
For the third best	2 00
For the fourth best	1 00

BASKET.—(HANGING)—

For the best, grown at least one month in the basket	3 00
For the second best	2 00
For the third best	1 00

BOUQUETS.—(HAND)—

For the best pair	3 00
For the second best	2 00

BOUQUETS.—(PARLOR)—

For the best pair	3 00
For the second best	2 00

DAHLIAS.—

For the best twelve named varieties	2 00

DESIGN.—(FLORAL)—

For the best	4 00
For the second best	2 00

FLOWERS.—(CUT)—[Variety and arrangement will be considered as well as rarity and quantity.

For the best Collection, and best kept during the Exhibition, not exceeding three stands	6 00
For the second best	4 00
For the third best	2 00
For the best Stand	3 00
For the second best	2 00
For the third best	1 00

For the best arranged Basket or Dish..... 3 00
For the second best..... 2 00

GLADIOLUS.—

For the best Collection, named or unnamed varieties..... 5 00
For the second best..... 3 00
For the best ten named varieties..... 3 00
For the second best..... 2 00
For the best specimen spike..... 1 00
For the best seedling..... 1 00

PANSIES.—

For the best display..... 3 00
For the second best..... 2 00
For the third best..... 1 00

PINKS.—(China)—

For the best display..... 2 00
For the second best..... 1 00

PETUNIAS.—

For the best display..... 2 00
For the second best..... 1 00

VERBENAS.—

For the best display..... 3 00
For the second best..... 2 00
For the third best..... 1 00
For the best display of seedlings..... 2 00

STOVE AND GREENHOUSE PLANTS.

PLANTS WITH ORNAMENTAL FOLIAGE.—

For the best twelve..... $ 15 00
For the second best..... 8 00
For the best six..... 5 00
For the second best..... 3 00
For the best single..... 3 00
For the second best..... 1 00

PLANTS IN BLOOM.—

For the best four..... 5 00
For the second best..... 3 00
For the best single..... 3 00
For the second best..... 1 00

RARE AND NEW PLANTS.—

For the best collection 6 00
For the second best 4 00

FERNS AND LYCOPODS.—

For the best collection 6 00
For the second best 4 00

PARLOR PLANTS IN POTS.—(FROM AMATEURS)—

For the best collection, not exceeding twelve varieties 5 00
For the second best 3 00
For the best single Plant 2 00
For the second best 1 00

FERNERY OR WARDIAN CASE, from any source.—

For the best 3 00
For the second best 1 00

VEGETABLES.

COMMITTEE.—Alexander Marsh, *Chairman;* Thomas R. Norcross, J. D. Lovell, Charles Belcher, and William H. Hackett, of *Worcester.*

☞All entries in this Department must be made with the Secretary before 6 o'clock P. M., on the 15th day of September. And all Vegetables exhibited for premium must be in the Hall of CERES by 4 o'clock P. M., on Wednesday, the 19th day of September.

☞The Committee will meet at 9 o'clock on Thursday morning, September 20th, or sooner, if they choose, to determine the awards.

BEANS.—

For the best four named varieties ..... $ 1 00

BEETS.—

For the best six Egyptian 1 00
For the best six Sugar 1 00
For the best six Turnip 1 00

CABBAGES.—

For the best two Large Flat Brunswick 2 00
For the best single specimen 1 00
For the best two Drumhead 2 00

For the second best	1 00
For the best two Drumhead Savoy	2 00
For the best single specimen	1 00
For the best two early Sweinfurth	1 00
For the best two Red	2 00
For the best single specimen	1 00
For the best two Savoy	2 00
For the best single specimen	1 00

CARROTS.—

For the best six Early Horn or Short Scarlet	1 00
For the best six Long Orange	1 00
For the best six Intermediate	1 00

CAULIFLOWERS.—

For the best three specimens	2 00
For the best single specimen	1 00

CELERY.—

For the best six roots	3 00
For the second best	2 00

CORN.—

For the best Darling's Early Sweet	six ears	2 00
For the second best	"	1 00
For the best Stowell's Evergreen	"	2 00
For the second best	"	1 00
For the best Early Minnesota	"	2 00
For the second best	"	1 00
For the best Moore's Early Concord	"	2 00
For the second best	"	1 00
For the best of any other named variety	"	2 00
For the second best	"	1 00

CRANBERRIES.—

For the best peck	1 00

CUCUMBERS.—

For the best half peck for pickling	2 00

EGG PLANT.—

For the best three specimens	1 00

HORSE RADISH.—

For the best six roots	1 00

MELONS.—

For the best two Water	2 00
For the second best	1 00
For the best Green Flesh, three specimens	2 00
For the best Yellow Flesh, three specimens	2 00

ONIONS.—

For the best half peck of Red	1 00
For the best half peck of Silver Skin	1 00
For the best half peck of Yellow Danvers	1 00
For the best half peck of any other named variety	1 00

PARSNEPS.—

For the best six Guernsey	1 00
For the best six Hollow Crown	1 00

POTATOES.—

For the best half peck Early Rose	2 00
For the second best	1 00
For the best half peck Snowflake	2 00
For the second best	1 00
For the best half peck Durgin's Seedling	2 00
For the second best	1 00
For the best half peck Extra Early Vt	2 00
For the second best	1 00
For the best half peck of any other named variety	2 00

PUMPKINS.—

For the best three	2 00
For the second best	1 00

PEPPERS.—

For the best half peck	1 00

SALSIFY.—

For the best six specimens	1 00

SQUASHES.—

For the best three pure Crookneck	1 00
For the best three pure Canada Crookneck	1 00
For the best three pure Hubbard	2 00
For the best three pure Marblehead	2 00
For the best three pure Marrow	2 00

For the best three pure Turban..... 2 00
For the best three pure Butman..... 2 00

TOMATOES.—

For the best Canada Victor..... 1 00
For the best Boston Market..... 1 00
For the best twelve Tilden..... 1 00
For the best twelve of any other named variety..... 1 00

TURNIPS.—

For the best six English or Flat, white or yellow..... 1 00
For the best six White Swedes..... 1 00
For the best twelve Yellow Swedes..... 1 00

A. D., 1878—MARCH.

SPECIAL EXHIBITION OF CHINESE AND OTHER PRIMROSES, CYCLAMENS, HYACINTHS, AND OTHER SPRING-BLOOMING PLANTS.

PLANTS IN BLOOM.—

For the best general display	$ 5 00
For the second best general display	3 00

PRIMROSES.—

For the best six in bloom	3 00
For the second best	2 00
For the best single plant	2 00
For the second best single plant	1 00

CYCLAMENS.—

For the best six in bloom	3 00
For the second best six in bloom	2 00
For the best single plant	2 00
For the second best single plant	1 00

HYACINTHS.—

For the best six in pots	3 00
For the best three in pots	1 00
For the best single specimen	1 00

☞All articles offered for premium must remain within the Hall, during the hours of exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, &c.

TRANSACTIONS

OF THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1878;

COMPRISING

ESSAYS:—UPON THE APPLE, BY O. B. HADWEN; THE PEAR, BY JAMES DRAPER; THE STRAWBERRY, BY WM. H. EARLE; VEGETABLES, BY SYLVANUS SEARS.

ALSO,

THE ANNUAL REPORTS OF THE LIBRARIAN AND OF THE SECRETARY.

WORCESTER, MASS.:
PRESS OF THE FRANKLIN PRINTING HOUSE.
1878.

WORCESTER COUNTY HORTICULTURAL SOCIETY.

The Committee on Publication have deemed it unnecessary to burden this volume of Transactions with the Schedule of Premiums for 1878.

They also wish it to be distinctly understood that the Society must not be held responsible for opinions or statements, in the Essays now printed, which must depend, for verification, upon the good faith and reputation of their respective authors.

EDWARD W. LINCOLN,

Chairman.

HORTICULTURAL HALL,
January 12, A. D., 1878.

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THE APPLE.

Read before the Society, February 8th, A. D. 1877.

BY O. B. HADWEN.

If briefly considering the Apple in a few of its phases, will thereby afford material for discussion, tending to create an interest and forward the purposes for which these meetings are called, we most cheerfully comply with the wishes of the Society.

Considering the subject by aggregates we are assured by the last census of Massachusetts' agricultural products that the apple takes the lead of the fruit-growing interests of the State. The soil and climate are found congenial to the growth of the apple; the product of the State in the year 1874 amounts to the very respectable number of 3,252,957 bushels, valued at the sum of $1,450,252. We are also safe in assuming that the people of Massachusetts consume as much, if not more, fruit than the people of any other State in proportion to their number: in fact the home supply does not often equal the demand. Worcester County takes the front rank among the counties of the State in the apple product. In the year 1874 the product of the county was 933,013 bushels, valued at $380,594. The importance of the apple crop both in bushels and dollars is very apparent, but there are other phases of the subject, which are especially important to those who grow fruit as incidental or special products.

Worcester County occupying a central portion of the State, and lying within the great fruit-growing belt, is, both in soil and climate, especially adapted to the growth of the apple, which has received care and cultivation from the earliest settlement of the county. Here many varieties of apples have had their origin that are proving highly satisfactory, not only here, but wherever they have been disseminated. Among these are the Hubbardston Nonesuch, first found growing in the town of Hubbardston, and the original tree is still in existence; few apples rank higher in its season, or are more universally esteemed wherever cultivated. The Holden Pippin originated on the farm of Captain Samuel Hubbard, of Holden.

The tree is at the present time about one hundred and twenty years old, and is still in bearing. The tree is a strong and vigorous grower and bears abundant crops in alternate years. The fruit is highly prized for culinary purposes, and in condition when other apples are not abundant.

The Mother apple, originating in the Town of Bolton, is one of the high aromatic flavored apples, and much sought as a dessert fruit; the tree is but moderately vigorous, but bears abundant crops in alternate years. But few apples have a deeper color or more flavor than the Mother.

The Palmer Greening, or Washington Royal, has as many desirable qualities as any, not excepting the once famous Newtown Pippin. It had its origin on the farm of Joseph P. Hayward, of Sterling. This apple is regarded in the neighborhood where it originated, and is considered where it has been introduced, as one of the highest excellence, both for the table and for cooking, and commands a higher price in market than other sorts; it has not yet been widely disseminated, although in our judgment it ought to be.

The Sutton Beauty also originated in this county, on the farm of John Waters, in the town of Sutton. This is also proving the peer of the Hubbardston Nonesuch, in some respects even better, has more character, flesh more tender and juicy, better color, and keeps later; a very abundant bearer, and the tree having an upright growth supports its heavy crops with less injury by breaking than trees of a spreading habit. We have no doubt that this sort will grow into favor as it becomes better known and more extensively grown.

The Foundling, having its orign in Groton, is also proving a desirable sort, as well as an annual bearer of large crops. Some years we have found this our most profitable apple, having the characteristic of commencing to ripen in August, and continuing on the trees even till November. Thus we have an early apple for three months, equally good for the dessert or culinary uses. The tree has a low spreading habit; it is more desirable to engraft it into upright growing trees.

The Twenty Ounce, is supposed to have originated in this county, north of Worcester, and used to be sold in our market for the Lyscom, which it sometimes resembles. When shown at the early Exhibitions of the Society it was soon discovered that it differed from the Lyscom, and being exhibited from the town of Sterling it was named and shown as the Sterling for many years. In the meantime it was described by Downing under the name of Twenty Ounce, and a half-dozen other synonyms; but let us call it the Twenty Ounce henceforth. This apple, whether to the manor born or not, proves itself a very desirable variety, large, showy, juicy, and sprightly, an annual bearer of large crops, and

the tree of excellent habit; in fact no apple seems to thrive better with reasonable cultivation; and its season is from September to January.

The Worcester Spy, also originating here, has some desirable qualities, but after ten years trial we cannot recommend it for general cultivation.

The Leicester Winter Sweet, had its origin in Leicester, and was brought into notice by the late J. Milton Earle. It is proving after fair trial, to have many desirable qualities and worthy of cultivation. It is the most showy of the Winter Sweet apples, and especially good for baking.

There are of course many other varieties of apples of both foreign and native origin, that will repay well for good cultivation; among these are the Red Astrachan, Williams' Early Red, Duchess of Oldenburg, Sweet Bough, Gravenstein, Maiden's Blush, Pumpkin Sweet, Fameuse, Baldwin, R. I. Greening, Yellow Bellefleur, Roxbury Russett, which are very generally cultivated. In almost every town in the county there exist some apples of decided merit, which have not been brought into general notice, that seem to thrive well and bear abundant crops, and if more generally disseminated would prove valuable acquisitions. But we have already varieties enough, unless the new ones prove better than the old, and but few apples probably will ever be introduced superior to the Duchess of Oldenburg, Williams' Early Red, Gravenstein, and other popular varieties in their respective seasons.

Good care should ever be adopted in the cultivation of fruit, but the treatment should vary with the condition of the soil and other surrounding circumstances. The orchardist who succeeds well with his trees in grass, in land of great depth and fertility, should not recommend or prescribe grass for orchards in thin and impoverished soil. The man who has a shallow soil and has injured the roots of his trees with the plough because they are near the surface of the earth, should not object to the thorough manipulation of deep soils. Therefore it is absolutely necessary for each and every grower of fruit to diligently and patiently study his situation and surroundings, if he desires the best results to reward his labor. Fruit trees exposed to bleak, and especially to drying winds at the time they are in blossom, are likely to be damaged by drying and destroying the adhesive qualities of the pollen of the flower, and wafting it from, and beyond the uses which Nature intended it to serve. Thus shelter is as important to the orchard as is good cultivation; and without shelter, crops are more uncertain, and many orchards failures. Shelter from winds is very easily obtained by belts of trees surrounding the orchard, and no better tree can be found than the European Larch for that purpose, at least for this county. If set at the same time of the orchard, its rapidity of growth gives the orchard complete shelter before the trees

come in bearing; and even if neglected at that time, they can be planted out afterward and in six or eight years will be sufficiently grown to afford protection. There are other trees which also are desirable for protecting the orchard; the White Pine, the Norway Spruce and the Hemlock. These trees are of spreading habit, requiring more room, but as it is always desirable to add to the beauty of the landscape, a variety of trees if judiciously planted, having a regard for appearances, will be both ornamental and useful; but old-fashioned farmers have strong objections to trees, and cherish the dogma that they injure grass more than do the winds; at the same time forgetting all about the advantage and shelter they afford the fruit, as well as other crops. But there are those who love to believe that true economy and true taste are accordant; and that the graces, as well as the profits of life, may be kept alive and in view, by the practical aims of all farmers worthy of the name.

In considering the cultivation of the apple we have therefore concluded that due economy requires that the orchard, and trees growing out of the orchard, should be well sheltered from fierce winds from any quarter, and especially from the drying winds blowing from southwest or northwest to insure good crops; and if large annual crops of fair fruit are expected no other crop should be taken from the ground, unless annually enriched. But if the soil is deep and retentive of manures and moisture, and the trees are planted at least forty feet apart, other crops may be taken from the orchard without apparent injury to the apples. The soil must by no means be allowed to become impoverished, but should receive an annual dressing of suitable manures. Experience teaches that for extensive orchards, trees planted forty feet apart is a desirable distance; the trees growing shapely, and giving ample space for cultivation of other crops if desired; and it must be remembered the roots of trees occupy and are nourished by the lower strata of the soil to a considerable extent, and the tops unquestionably derive sustenance from the ocean of atmosphere that surrounds them.

In the earlier history of Pomology in this county, the fruit-grower had but few insects to contend with; but it is found that just in proportion as you increase, improve and cultivate your fruits, insect enemies increase in like proportion, confronting the fruit-grower on every hand, and thereby his best efforts are often thwarted. We can only master these enemies by studying their habits, and we may thank the entomologists that have pointed out their habits, and the life history of every insect that make depredations in the orchard and garden. Among the insects that commence at the root or base of the tree is the too well known apple tree borer. They do vast injury to the apple tree, but they are easily checked if taken in their early stages of insect life. The egg is deposited near the base of

the tree in the month of June. Instinct seems to direct the deposit of the eggs where the bark is moist and soft, the worm soon comes from the egg and perforates the bark; making a small hole it finds its sustenance beneath the bark, at the same time making a circuitous apperture. If trees are examined early in the months of August or September, their hiding place may at once be detected by a slight discoloration of the bark, an increase of moisture, and by their castings being thrust outside, which appear like fine sawdust; and it is by this that their presence in the tree is most readily recognized. At this stage of their growth they are easily cut out with the point of a knife; but if neglected they work their way into the sap wood and can only be removed by a flexible copper or iron wire, and they are with considerable difficulty reached even with a wire, if too long neglected.

There are also insects which feed upon the leaf of the apple tree; hereabout the tent caterpillars are most numerous and destructive. Fortunately the habit of these insects render them so conspicuous that their destruction in the early stages of their existence is easily accomplished The female lays her eggs in June or July, arranging them in the form of a broad ring, on the twigs near the extremity of the branches; they are protected by a coating substance apparently water and weather proof, and which is eaten by the young worms when first hatched. The eggs thus deposited remain until the next spring when they commence hatching, about the same time that the buds begin to expand, but seldom all the eggs are hatched at once; if cold days intervene they do not hatch until warm days return. By the cold storm which occurred in 1876 nearly all the tent caterpillars were destroyed soon after being hatched, but when a season favors them, which is usually the case, they come forth in vast numbers, and their great voracity strips the trees of their foliage and is of serious consequence to the orchard. Soon after the worms are hatched they commence feeding upon the young and succulent leaf, and unite in their efforts to form a web to protect them from the weather; at this stage they are conspicuous enough to be easily seen, and when in their tent are readily destroyed en masse; and no orchardist can afford to neglect to destroy a worm, at once so destructive and unsightly.

The canker worm has sometimes overrun some of the orchards in the county, and they have often counteracted the injurious depredations of the codling moth, by cutting off the supply of fruit, thereby starving them out; therefore it would sometimes seem that insect can more effectually contend with insect than the fruit-grower does.

The Codling Moth and the Curculio, are most destructive to the apple; often rendering the bulk of the crop unmerchantable by their depredations; and thus far they have had almost undisputed sway. But few

cultivators successfully prevent or contend with these insects, and they are rapidly increasing. We think that the fruit-grower in the future will have to devise means and give time and labor to destroy these insects if good fruit is to be grown, and the sooner we learn the most effectual means for their destruction the better.

The cultivation of the apple has long been an important interest in our county, and holds a respectable rank among our agricultural industries. The money value received for the last crop of 1876, apples exported from the county, will probably exceed by far the value of any other product; thousands of barrels having been, and are still being sent to other cities and foreign ports; and although the price has been comparatively low, still the sum total must amount to several hundred thousand dollars. This has been accomplished by very ordinary, I might almost say by haphazard cultivation; good cultivation, or the care that other crops have to receive, would have undoubtedly doubled the money value of the apple crop by largely reducing the per cent. of fruit that is unmerchantable, and unfit for use. All questions regarding the culture of crops of all kinds, sooner or later resolve themselves into the one great problem, *Profit*, which is the bottom round of the ladder of success.

THE PEAR:

ITS CULTIVATION AND VARIETIES.

Read before the Society, February 15th, A. D. 1877.

BY JAMES DRAPER.

While the question of the over production of fruit, and the over stocking of the market is being agitated, some may doubt the expediency of increasing the cultivation of fruit in this section as a matter of profit. Consequently it may not be time wholly misspent to discuss some of the features of fruit growing that will be of practical value to every tiller of the soil. Whether the growing of fruit for the market is as profitable, taking all things into account, as the culture of vegetables, or the production of milk, I shall not attempt to decide. But on one point I am certain, that no farmer or owner of a garden plot can afford to do less than to provide a liberal supply of fruit for his own family of the choicest varieties, so arranged as to cover the entire season of the year. It would certainly seem presumptuous for me to think I could give much new information to a body of old and well tried fruit growers like many we find present to-day, but as you have requested me to open the discussion to-day, by a paper on Pears, I have briefly noted down a few things that come to mind from my observation and experience during the last fifteen years. The matter of the origin of the many varieties may not be of any special interest, but while we are indebted to the pomologists of other countries for the production of some of our best and highest flavored varieties, we are glad to note that our own American cultivators have given as the reward of their labors, some of the hardiest, most productive, and most valuable varieties, the Clapp's Favorite, Seckel, Sheldon, Howell, Onondaga, and Lawrence, proving to be in many respects equal to any given us from foreign sources.

Shall we plant standard or dwarf trees? Many will answer emphatically, standards. I would not give much for dwarfs, they do not amount to anything. My experience with the pear on a quince stock on my heavy, clayey soil, has been very favorable, and I have now in bearing

many dwarf trees that have produced heavy crops for over twenty years, and some trees yielding from two to four bushels of fruit annually. If one has a light or sandy soil I would not recommend dwarfs, except perhaps I should want the Duchesse, Louise Bonne and Vicar, on the quince roots. On our rich, loamy and heavy clayey soils, where the pear seems to thrive best, I should set one-third to one-half of the dwarfs, taking of the varieties that seem to be particularly adapted to the quince stock; of these the Duchess, Louise Bonne de Jersey, Belle Lucrative, Vicar, Doyenné du Comice, Beurre Superfin, and perhaps the Clapp's Favorite. I should plant these trees between the standards, and by so doing we can plant nearly double the number of trees on an acre. Pear trees may be set in rows twenty feet apart, and twenty feet apart in the row. By planting dwarfs between we get the trees ten feet apart in each row, which is a good distance for an orchard.

How shall a tree be planted? I am aware how hundreds of trees are planted, by digging a small hole, filling it half full of strong manure, stick in the tree, jam the roots down with the boot heel, fill up the hole with sods, stone and dirt, and then vent your wrath upon the nurseryman for selling you poor trees, calling him a cheat, a swindler, a scoundrel, and other pet names, because your trees happen to die. In the first place the roots of a tree must have room; so let the hole be dug large enough to admit all the roots without cramping them, and then set the tree into the ground so that the small surface roots will be about two inches lower than where they stood in the nursery rows. Dwarf trees should be set so that the quince stock will be buried three to four inches below the level of the ground; in this way many dwarf trees will strike a pear root above the bud, and so the tree eventually becomes a standard; we then have the advantage of early fruitfulness and long life to the tree. Having placed the tree in the hole in proper position, fill in the hole with fine dirt, working it in around the roots with the fingers or a small tamping stick; when the roots are well covered a few shovelsful of compost may be used to advantage, but the use of green, unfermented manures should always be avoided in the transplanting of trees.

In regard to the after culture of the pear, if the soil is already rich the tree will not require much extra feeding, but on the average of our New England soils, trees need liberal manuring to grow and produce well. The manure should be applied in the fall of the year; three or four good shovelsful of well decomposed manure piled around the trunk of the tree will answer a double purpose of preventing the ravages of mice, and of furnishing nutriment to the tree, at the right time. The spring rains cause the leaching of the manure about the roots, which by being enriched early in the season will make a good growth of wood that becomes well ripened before the autumn frosts.

The time for transplanting trees, spring or fall, should also be considered. If the soil is dry and well drained of surface water, trees may be transplanted in the fall of the year with as equally good results as in the spring. The soil is in better condition, being dry and mellow, and will pack better around the roots; the tree will get firmly established ready for an early growth the next year; and, again, a farmer usually has more leisure in the fall, and can give more time to the work, which will be done better than in the hurry of the spring work. If the land is in any way wet or exposed to the bleak northerly winds, I should invariably take the spring months for transplanting. The proportion of spring to fall planting, as practiced by my customers, has been as two to one, two-thirds of our trade being in the spring, the other third in the fall of the year.

When and how shall we prune? The nurserymen have hit upon one general rule: "to prune when your knife is sharp," which establishes one fact,—that light knife pruning may be performed at any season of the year. On the other hand, if large limbs are to be taken off, or a heavy pruning on large trees, we should take the months of March and April for the purpose. Trees, when first transplanted, should be cut back heavy, at least two-thirds of the previous year's growth should be taken off. This will help counterbalance the loss of root, and also give the root a chance to get established first, without being compelled to furnish sustenance for bud and leaf on superfluous wood. I believe that more trees from the nursery die every year for lack of this cutting back process than from any other cause. After the first year's heavy pruning, a young tree will not require much pruning for several years; simply keep them clear of sprouts and cross limbs. When we find the trees making a heavy growth, say of two to three feet in a single year, it is best to cut them back again, which will make them more stocky, and it also tends to bring them earlier into bearing, which is desirable when a tree has attained a bearing size.

If one's orchard is in an exposed place where strong winds prevail, a shorter, more stocky tree is most desirable.

As nearly every variety of pear is better to be taken from the tree and ripened in the house, a general rule that will apply to every variety is most desirable; in this I have special reference to the summer and early autumn pears. The later autumn and winter pears should all be gathered about the first week in October. The earlier fruit should always be gathered a week or ten days before it is ripe, and the time to pick them can generally be decided in a very simple manner. When the windfalls and worm-eaten specimens that drop from the tree, have the appearance of ripe fruit by their color, mellowness and natural flavor, it is safe to say

that it is about the right time to gather the crop. Pick them carefully by hand, and store in a dark, dry, cold place, and they will soon be ready for use or the market. Pears intended for the market should be sent away before they become mellow, as it does not much improve the looks of fruit to carry it over rough roads and pavements when in a ripe or mellow condition. The later varieties should be gathered with great care, not allowing them to get bruised in handling, and stored in a dark, dry cellar, as cold as may be without freezing. If it is desirable at any time to hasten the season of ripening, carry them into a warmer room and they will usually ripen in a short time.

With a list of over a thousand named varieties, and some over a hundred in general cultivation in this country, there may arise some differences of opinion from what I consider the most valuable sorts for general cultivation. I have aimed to name the varieties that contain the greatest number of valuable qualities, such as productiveness, healthy, vigorous growth of tree, excellence of flavor of fruit, and good keeping sorts that will not decay too rapidly.

To report the conversation with a customer last spring will give some idea of what is generally conceded to be the most popular variety. After the usual salutation, I put the question: "Something I can show you today, sir?" "Yes, sir; I want to buy some pear trees." "Do you wish for standard or dwarf trees?" "No, sir; them are not what I want at all. I want them kind what you call Bartletts." "Very well; we have that variety, both as standards and dwarfs, but they do best as standards; I will show you what we have." Showing my stock of trees, size and price being satisfactory, I learn that he wants a dozen trees, and suggest that as he is just starting his fruit garden, and as he has room for only a dozen trees, that it would be desirable to have several varieties so as to give him a succession of fruit through the season. I mention that we have some varieties of summer pears, some ripening during the fall, and some winter varieties. "All right, sir; them's just the kind I want. Put me down two early Bartletts, two fall Bartletts, two winter Bartletts, and I'll have all the rest the regular Bartletts." The sum and substance of this matter is that the Bartlett pear is the one above all others that everybody knows. I think I am safe in saying that fully one-half of my yearly sales of pear trees are of that one variety, and although I would not recommend planting as many varieties of the Bartlett as did my Irish customer, I should make it the leading variety for market culture on account of its unrivaled popularity.

Next to the Bartlett in value, as a market sort, I should name the Clapp's Favorite, which I consider one of the greatest rivals of the Bartlett we now have, ripening a week or ten days earlier, being larger in

size on the average, of a rich crimson and yellow color, which makes it very attractive on the fruit stands, and also having a more sprightly, vinous flavor, which I consider far superior to the Bartlett. The tree makes a very healthy, vigorous growth, is perfectly hardy, and comes into bearing young, another desirable feature.

Ripening after the Bartlett, next in value I should place the Sheldon, one of our most valuable American pears. It is not as productive a sort as the two first named, but a fruit of good size and most excellent quality, and becoming more and more popular every year on our fruit stands; we find it also an excellent keeper, a very desirable quality in our fall pears. Following the Sheldon in order of ripening comes the Louise Bonne de Jersey, one of the heaviest and most regular bearing varieties now in cultivation. In size it is rather below the average, but it is generally a very highly colored fruit that gives it an attractive appearance on the stand, and makes for it a ready sale. The Duchesse you are already aware is the largest size fruit grown. It is very juicy, but a coarse grained fruit, and not of the highest quality, but its extra large size commands for it a ready sale at high prices. This is one variety that seems to thrive best on the quince root, many having found it to be a failure on the pear root.

The Beurre Bosc is perhaps the most popular variety of October pears now in the Worcester market, and the large, rich, golden russet colored specimens are much sought after by the lovers of a delicious fruit. To get this variety it is best to graft it upon some old trees, as it is a very poor grower in the nursery row, and but few nurserymen attempt to grow the tree for sale, on account of its slow crooked habit of growth. Next to the Beurre Bosc, we shall place the Beurre d' Anjou, now generally admitted by fruit growers and horticulturists in this section to be the best in every particular of the late fall pears. It commences ripening in October, and many years will keep till Thanksgiving. The President of the American Pomological Society, the Hon. Marshall P. Wilder, claims for this sort that it is the best pear of its season grown in this country, covering more points of value than any other, and all lovers of a fine grained, rich, melting, high flavored fruit, will coincide in his opinion.

For a later fall or early winter pear we have the Lawrence, a fruit of medium size only, but ranking among the best in quality, being of fine texture and most excellent flavor. It is also a good keeper, and ripens and colors up well. I have named a list of eight varieties of pears, covering almost the entire season, that, in my judgment, are the most valuable sorts for general cultivation for the market, to be found in the list of pears.

The tendency to cultivate a great number of varieties is, I think, a

mistake; the fewer sorts the better. If I were growing fruit for the market, and was to plant a dozen trees, I should not care for more than two sorts; out of twenty-five trees I would not have but four, and out of a hundred not over eight, and those eight would be the ones before named.

To go on a little farther, we will consider a few varieties for amateur culture, or for one's own family use, covering a longer season, following in closer succession, and embracing some of the finest flavored sorts of the highest character. Ripening a few weeks before the Bartlett, we have the Rostiezer, a juicy, sugary pear, of small size, and the Beurre Giffard, a fruit of medium size, a good bearer and of fine flavor. Ripening after the Bartlett, we have the Seckel, known to you all as one of the richest, finest flavored pears in cultivation. Although I would advise every one to have a Seckel pear tree for their own use, I hardly think it a profitable variety to grow for the market.

The Doyenné Boussoc is a fruit of large size and quite showy, and some cultivators have found it profitable as a market sort. Like the Bartlett, it decays rapidly, and is not as reliable as some other varieties ripening at the same time. The lovers of fruit of a sprightly, vinous flavor will find the Beurre Superfin and Paradis d' Automne to be most excellent varieties. If a sweet, melting, sugary pear is wanted, the Beurre Hardy will supply the want, and ripening about the first of October

If any one wishes for a fine growing tree of a shapely, upright habit of growth, as an ornament to an estate, take the Buffum and you will be well suited, but you will find the fruit small, and number two or three in quality. ' If you like a mealy pear you will have it in the Buffum, and get a crop of them every year. The Belle Lucrative is another regular and heavy bearing variety of good size, and very juicy and sweet, in fact it is rather too sweet to suit some tastes, but our sweet toothed pear eaters all claim that it is just splendid. I have found this to be a profitable market sort, being of good size, and a heavy bearer every year.

Another variety of the highest character, and ripening in November, is the Doyenné du Comice, a fruit of a large size, and a fair cropper. This variety seems to thrive best on the quince stock. The Winter Nelis is a small sized November pear, but a very rich, melting, juicy fruit, of the highest flavor. This is one of those rambling growing trees that discourage nurserymen, and it is best obtained by grafting it upon some older trees.

A variety that many have condemned on account of its ripening so poorly, is the Vicar, one of our latest keeping varieties. Now the fault does not rest so much with the pear as with the management it receives. It is an enormous bearer, and bears regularly every year. By thinning

the fruit, and not leaving more than one third upon the tree, we shall get fine large specimens that will ripen well, and prove to be of very good quality. Like all winter pears it wants to be stored in a dark, cold, dry place, till ready for use; with this management the Vicar is a very valuable variety; with neglect it will be worthless every year. The Beurre Clairgeau is a very profitable market sort, being a good bearer, and a large sized, red cheeked, handsome fruit. Its attractive appearance will sell the fruit, but its quality would never commend it. I did not put this on my list of eight best market sorts, as I consider it an imposition upon the public taste, to palm off upon them such a poor fruit as this, even if it is handsome, and there is money in it.

The Flemish Beauty was quite popular a few years ago, but of late years the fruit has cracked badly, which makes it unreliable. In point of flavor it is superior, and on this account I would venture a single tree in a collection for one's own use. Beurre Diel, or November pear, once very popular, has the same habit as the above, but I think not quite as bad. It is a great bearer, good size, keeps, and ripens well, and with a bright golden color. On account of this habit of cracking, I should place the Onondaga in place of the Beurre Diel, as it is very much like it in appearance and ripens nearly at the same time, perhaps a little earlier of the two.

This list might be extended by adding the St. Ghislain and Washington, fine September pears, and the Josephine de Malines and Mt. Vernon for winter, and so on to the end of the chapter. I will allude to one more and then I am done. The Earle's Bergamot, a seedling originated by the late Hon. John Milton Earle, of this city, is a variety that has impressed itself very favorably upon my taste. It has a peculiar flavor of its own that lovers of choice fruit will enjoy. Our friend Mr. V. P. Townsend, of Quinsigamond, is the only exhibitor of this fruit at our Horticultural Exhibition, to my knowledge, but I hope that in some way it may become more generally disseminated through this section, for in point of quality there are few pears that will equal it.

In this rambling sort of a manner I have given you my views and experience. The subject is open for your discussion. If, as the result of it, some are induced to thus improve their homes by planting a few trees, let me add get good trees, of good varieties, from some reliable nurseryman; give them good care, and your labors will be crowned with a liberal harvest, and your children and your children's children will rise up and call you blessed.

THE STRAWBERRY.

Read before the Society, February 22, *A. D.* 1877.

BY WILLIAM H. EARLE.

The cultivation of the Strawberry is a subject of increasing importance to all persons interested in the growing of small fruits, especially in the vicinity of large cities and manufacturing villages.

In my boyhood days in the quiet country town of Hubbardston, on my father's farm, which by the way was adjoining the farm where still stands the original apple tree, nearly a half mile from any human habitation, from which sprang the delicious fruit now known all over the continent as the "Hubbardston Nonesuch,"—on this same farm I have often gathered a pailful of native strawberries in an afternoon; but cannot remember ever having seen, in that town, a single dish of *cultivated* strawberries before I was fifteen years of age; in fact, for some years after, the growing of a family supply even was considered doubtful, and the idea of selling cultivated fruit for profit was seldom entertained. Now, perhaps, there is no fruit grown that finds a readier market or affords the grower a better profit.

The interest manifested within the past few years in growing strawberries is most encouraging, and shows how earnestly the people desire to raise their own fruit. And this is right, for fruit long since ceased to be looked upon as a mere luxury for the few and fortunate, and has come to be regarded as an essential article of healthful food. I know of no other fruit that thrives and flourishes over so large a portion of the earth's surface as the strawberry. It is adapted to almost all kinds of soil, and with intelligent treatment will bring the grower ample remuneration for his labor and outlay.

More than 400 varieties have been under cultivation in this country within the last twenty years. To produce these 400 varieties many hundred thousand seedlings have been raised. I was told last summer by Mr. Durand, the originator of the "Great American" Strawberry, that

he seldom obtained more than two or three varieties, out of several thousand seedlings, that were worthy of being propagated. It is said the late Seth Boyden raised some twelve or fifteen thousand seedlings, conducting many of his experiments on strictly scientific principles, crossing varieties, guarding against accidents from the elements and insects by protecting his propagating plants during the blossoming season, but from this large number we seldom hear of any except the "Agriculturist," "Green Prolific," and "Boyden's No. 30"; and even this last has recently been greatly improved and is now known as "Boyden's No. 30 *Improved.*"

Although I have grown strawberries in Minnesota, New Jersey and Massachusetts, yet my experience is comparatively limited; and in this paper I can only attempt to touch upon a few of the more important requisites for the successful cultivation of the strawberry.

The best soil is a deep light loam, not too dry, which should be prepared in the fall by deep ploughing (and if not too stony the sub-soil plough should be used), putting on all the well rotted manure you can make or buy—being careful to first see that it is *thoroughly pulverized* by being worked over at least two or three times—and then applied so as to leave it as near the surface as possible, but well mixed with the soil. Leave the ground in the fall in rough furrows, and at the earliest practical moment in the spring cross plough with a light one-horse plough. In this condition leave it until the day you are ready to set your plants.

And now comes the question, "*What kinds* shall I plant," and "*where* shall I procure genuine plants strictly true to name?"

In answering this question I shall name only a few kinds and such as I have quite thoroughly tested and consider best adapted to the soil and climate of this neighborhood. I shall also name them in the order in which my own experience, as a grower, has proved them to be valuable, both for family use and the market,—Charles Downing, Jucunda and Wilson's Albany.

These are all hermaphrodite, having perfect blossoms.

The "Charles Downing" is a seedling from the Downer's Prolific, which originated with Mr. Downer in Southern Kentucky. It is extremely hardy, ripens early, is of excellent flavor, and a great bearer.

The "Jucunda" I believe to be the handsomest and most attractive strawberry yet produced. It is uniformly large, of beautiful scarlet waxen color, and nearly every blossom forms fruit. It has a very long season. One year I gathered fruit from the same vines for six weeks in succession. The plants of this variety, however, make a very slow growth the first season after planting.

The "Wilson's Albany" needs no description. To those who have

not the taste, time or patience to cultivate the far more preferable varieties, and who expect a fair crop of fruit, with little or no care; or with those who live a long distance from their market and must therefore grow a kind that is firm in texture, and that will color up well, even when picked quite green, the Wilson's Albany will probably fill these unprofitable and unpardonable conditions better than any other variety I know. It originated twenty years ago, and by its great hardiness and productiveness has won its way in estimation among growers as a profitable market berry, until it is probably safe to say that nine-tenths of all the strawberries now raised for market in this country are of this variety,

To the question *where* shall we buy plants? I answer, only of persons who are known to be perfectly *reliable*, and who will therefore sell plants *true to name.* "By their *fruits* ye shall know them," applies in this case not only to the *plants* but also to the *seller.*

If possible select your plants from beds in your own neighborhood, where you have seen the perfect fruit growing. If possible set them out the *same day* they are taken up. Plants shipped by mail or express, from one State to another, are not worth on the average one-fourth as much as the same varieties procured near your home.

Your ground having been smoothed off and prepared as previously directed, you are now ready to mark off your rows with a garden line. The plan I have followed for the past few years has been to *plant in beds* of three rows each, the middle row being eighteen inches from each of the others, and the plants set twelve inches apart in the row. Fruit can thus be the more easily gathered. These beds should be three feet apart. The beds should be prepared only a little in advance of the planting, in order that the earth shall be *fresh* and moist in which the new plant is to be set. If the soil is in the condition it should be you will need no trowel, but should set your plants with your hands. If this is found too severe for the fingers, holes may be made with a dibble made from the handle of an old shovel. Suppose for instance you wish to plant out one acre in strawberries. If set as before indicated it will require about 21,000 plants to set an acre. To set these plants properly and economically will require two men and two boys, and if a dibble is used, a fifth man. The first one will prepare the ground and place the lines; the second will prepare the plants by cutting off with sharp shears the ends of the roots, and if the tops are much grown, the larger leaves, and then dip the roots in a liquid manure, made by putting a quart or more of well rotted manure into a pail of water. A boy then takes enough plants in a basket, covering the plants with a wet cloth, and drops them only as fast as the fourth man can properly set them out. They should be set well down into the ground and the soil *firmly pressed* about the plant; the surface of

the ground nearest the plant being, by this process, made as it should be, a little lower than the surrounding surface. In this manner I have set out 5,000 plants in a day with my own hands. Vigorous plants set in this way, freshly transplanted, will nearly every one live and succeed. Plants should be set out very early in the spring. I have no faith in fall planting. Properly set out they will very seldom need any watering. If set out late in the season it should be done on a cloudy day or late in the afternoon. After the field is planted the ground should be *kept entirely clear from weeds*, and all blossoms and runners should be pruned off the first season.

Wood ashes will be found one of the most valuable top dressings that can be applied. Late in the fall when the ground has become frozen, a *mulch* of pine leaves, hay or straw, should be applied, covering the whole ground. If the strawberry growers would unite in buying *salt hay*, probably there is no other material that is superior for this purpose. The following spring I should not remove the mulch, but only open a small space for the crown of each plant. This mulch will serve three purposes. It will keep the ground moist, prevent the growth of weeds, and keep the fruit clean as it ripens. But to secure the most bountiful crop perhaps the most important hint has not yet been suggested.

When President Wilder, our eminent horticulturist, was asked how he succeeded in growing such beautiful strawberries, he replied, "three "things are necessary. First, you should give them *plenty of water*. But "this will not answer unless you observe the second requisite; viz: Give "the plants a *little more water*. But with all this labor and care you will "fail in obtaining the best results if you fail in the third condition, viz: "*Give the plants a little more water*." This I believe to be the grand secret of success. How it can be accomplished is an important question for us to discuss.

After the fruit has been carefully gathered the tops of the plants may be cut off with a scythe and allowed to remain on the ground a few days, until the new shoots start up from the stools, (otherwise the hot July sun may kill the plants) then the whole ground should be raked over, and all mulch and rubbish removed and stacked up, ready for another winter's use.

For the remainder of the season the ground should be thoroughly cultivated and manured, and my practice has been to continue to keep off all runners as before; yet many prefer to let the runners take root the second season, and by covering the ground with plants, secure one more very large crop (although of rather smaller berries than when grown in hills), and after that plough them up and reset.

In the cultivation of this fruit, as in all others, remember the *better*

the culture the better the crop. Let no *green thing* be seen in your strawberry field, except the plants and fruit, for if weeds abound the *greenest* thing about the premises will be the *management.* If one "takes interest in the business, hates weeds, is up with the lark and free with elbow grease," he will be surprised at the possible results.

A Mr. Smith, of Wisconsin, says he grew 411 bushels on an acre. Thomas Meehan, editor of "Gardener's Monthly," says he saw at the grounds of J. B. Whitney, near Detroit, Michigan, a large milk pan filled with fruit by the picker, from a space so far as he could reach out around him without moving his feet away.

Year before last at my grounds at Sunnyside, on about three acres of land, I realized a gross income of a little over $2,000; a large proportion of my crop being choice varieties of strawberries.

In preparing strawberries for the market the same care should be used in making a *second quality* of all inferior fruit, as we practice in assorting apples or other fruit.

To those who plant, cultivate and market with intelligence, perseverance and care, the choicest varieties of strawberries, there will always be found a ready market, at good prices; while for *inferior* fruit (and in this list I must include the "Wilson,") a glutted market often affords the grower naught but low prices and disappointment.

If the same force, thought and effort that many of our amateur cultivators show in the pleasure and profit they obtain from their gardens, can be carried to the cultivation of our larger fields and farms, we shall all soon have a better appreciation of the capabilities of the soil, and more correct ideas of the uses and value of Horticulture.

To aid and encourage such progress is a worthy and commendable work.

GARDEN VEGETABLES.

Read before the Society, March 22, *A. D.* 1877.

BY SYLVANUS SEARS, OF WORCESTER.

The first garden we have any account of in Sacred or Profane History, was the Garden of Eden. It was certainly the most *beautiful*, as it contained everything that could delight the eye. It was certainly the most *useful*, as it contained everything that was needed, both for the food of man and beast. It was certainly the most *comprehensive*, as it contained not only all the flowers of fields, and all the vegetables that grew out of the ground, but also all the trees whose fruits were pleasant to the eye or good for food or any other use. That garden has passed away and the place where it was supposed to have been is now a howling wilderness. But man transgressed and was driven out of that garden, and since then he has been obliged to earn his bread by the sweat of his brow. But I am digressing and must come at once to my subject.

The great secret of success in market gardening lies in the succession of crops, heavy manuring, thorough cultivation and a good market; but all of these will not give the best results without the gardener's skill in keeping the ground fully occupied, and in that more than all other things is where not only gardeners but farmers fail; they keep too much unoccupied land, for if it is not occupied with crops it soon will be occupied by weeds.

In selecting a location for raising vegetables many have made great mistakes; first in locating too far from their market. It is done perhaps because the land is much cheaper, but they find their mistake when they come to transport their fertilizers to their land and cart their vegetables to the market. The cost of manure is very much enhanced by carrying it a long distance, and the vegetable gardener must have a good supply, else his crops will be meagre and of small size, and his profits will be proportionately small, and if his vegetables must be carted six or eight

miles over rough roads, and through the hot sun and dust of summer, they become bruised, wilted, and lose much of their fresh and inviting appearance, and as a matter of course cannot command so good a price in market. If he locates within one or two miles of his market, his teams will accomplish three or four times as much in hauling manure and in carrying his produce to market as he would if he was six or eight miles from it. Peter Henderson says in his "Gardening for Profit," "it is better to pay $500 an acre for land lying one or two miles from market than to have it given him at eight or ten miles away."

A gentleman was once asked how he managed to raise such beautiful flowers, replied: "I *manure* them with *brains*." So the market gardener has need of a large quantity of this commodity in order to make the business pay. He may not be able to write a nice *essay*, or speak *eloquently*, as many who have preceded me have done, and although he may not be able to tell how many hundreds of dollars he has made from an eighth of an acre of land, as some who have preceded me have done, yet he *may show* by the superior *quality* and *size* of his *vegetables* that he has not applied his talents in vain.

When to apply the *fertilizers*, *how*, and in what *quantities*, and *what kinds*, requires much discrimination and *study*, for on this *hinges* success or failure many times.

Some vegetables require fertilizers containing *Ammonia* and *Nitrogen*, in order for them to grow successfully; while others require potash, and others require phosphate of lime to develop them to perfection. Thirty years ago we had but little choice in fertilizers; barnyard manure was then the only source of supply and we must use that or none. But now we have fertilizers for almost every crop we grow if we have need to purchase them. I use barnyard manure for my principal supply, either fermented or in its green state, according to the crop I apply it to; and then use home-made superphosphate of lime to stimulate the crops to an earlier development; the same as some of our Congressmen take whisky or brandy to stimulate their brain when they are *writing* or *speaking*. And it *operates* the same in the *vegetable* as with the man when we use too much; it *floors them*, or in other words it kills the germ and the seed does not vegetate; but to obviate this trouble I throw a little soil over the phosphate and plant on top of that when I drop it in the hill.

Prof. Stockbridge, since he has been connected with our Agricultural College, has instituted a series of experiments which, I think, will be of incalculable benefit to the market gardeners of this State. He has demonstrated by his experiments that chemical fertilizers may be prepared which will be of equal benefit to the growing crops as *animal excrements*, and that they are to be procured and applied much cheaper, thus giving

a larger profit to the producer. Dr. Nichols has raised corn on the same piece of land twelve years in succession and applied nothing but chemical fertilizers, and the number of bushels per acre constantly increased until they reached 105 bushels per acre, and it was raised at a cost of less than fifty cents per bushel. I raised a crop of potatoes the past year with nothing but chemical fertilizer at a cost of $18 per acre, and it was a good crop.

In my opinion it is better for each gardener to raise some leading crop, whatever his land is best adapted to; for instance, if his land is warm and mellow, early peas or tomatoes will thrive and bring good prices if he gets them early; but if his land is a heavy, clayey soil, let him raise cabbages, squashes, or other *late* vegetables, and not attempt to compete with those having warmer soils. Whatever you *attempt* be sure and get *good seed;* what is more vexatious than finding after you have planted and tended a nice bed of early beets, when you come to pull them that they are nothing but mongrels, so stringy as to be unfit for use? It may cost a little more at first to get good seed, but it pays to do it.

What to plant and when to plant it, requires much discrimination and judgment, for if we plant our beans and early sweet corn too early, the late spring frosts are liable to cut them off, and if too late, others will get them into market before us.

What are the most reliable varieties of vegetables, is a question easier asked than answered. I will name some of the kinds of vegetables I have found reliable in my experience. Of early potatoes the Early Rose and Bresee's No. 1, have proved good with me. Of peas, I planted for succession Landreth's Extra Early, Little Gem, McLean's Advancer and Brown's Dwarf Marrow. Of beans, I find the best succession is the Yellow Six Weeks, White Wax, Dwarf Horticultural, Concord and Lima. Of beets, the Egyptian and Dewing's are the standard varieties. Of sweet corn, I plant first Russell's Extra Early, Naragansett, Moore's Concord and Stowell's Evergreen. Of cabbages for early market, I plant Jersey Wakefield, Winnigstadt and Fottler's Early Drumhead; for late or winter use, Flat Dutch, Red Drumhead, Mason Drumhead and American Savoy. Of squashes, Summer Crookneck, Canada Crookneck, Boston Marrow, Turban, Hubbard, and perhaps the Marblehead. Of tomatoes, the Canada Victor, Trophy, General Grant, Boston Market and Tilden stand pre-eminent. I have tested these kinds of vegetables and find them worthy of cultivation.

In preparing the land for vegetables much discrimination should be used, some kinds requiring a very rich soil and very mellow, while others require but moderately rich soil, but all of them will grow better in a good mellow seed-bed. Therefore, it is best to plough thoroughly twice

and harrow or cultivate to pulverize and level the surface. Thorough cultivation is necessary in raising vegetables successfully; the weeds should be kept down at all events. I have seen a crop of potatoes reduced one-half by suffering the weeds to get the mastery during hay time, and then it cost double to dig them. Who is there who admires a weedy garden, and who is there that does not admire a well kept, orderly garden, where the fruits and vegetables thrive in their luxuriance, and where profit blends with beauty and utility? And now, as we stand upon the verge of another spring, let us prepare in earnest for the work before us; for soon the warm sun and genial showers of May will awaken Mother Earth from her lethargy and we must be prepared to drive our work and not let the work drive us, for where so many things demand our attention at once we are liable to neglect some of them.

In conclusion I would say, let us look to the Giver of every good and perfect gift for a blessing upon our endeavors and for a fruitful season.

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society :

Another year has closed since my last annual report was made, and the Librarian is expected to make some statement in regard to the condition of the Library. In the discharge of that duty it gives him pleasure to say that the members have used the books and different publications, furnished by the society, to a greater extent than the previous year. The Library Committee place upon the shelves of the Library many of the most valuable publications issued, in this and other countries. It seems strange that they are not more fully appreciated by the members, and that greater numbers do not avail themselves of the advantages thus provided.

The LibraryCommittee have been laboring assiduously for several years past to procure such volumes of the *Revue Horticole* as are already published, but until the present year have been unable to do so, owing to the scarcity of the volume, interrupted by the war in 1870. They have this year succeeded in obtaining the volume of 1870, together with the other volumes complete to 1876, inclusive.

Other choice and valuable books have been purchased by the Committee, which will be found in the list herewith given, comprising all books and periodicals added to the Library the past year.

Public Libraries in the U. S. A. ; their History, Condition and Management.

Special Report from John Eaton, Commissioner of Education.

Report of Commissioner of Education, 1875 ; from John Eaton, Commissioner.

Census of Massachusetts, 1875 ; Prepared under the Direction of Carroll D. Wright, Chief of the Bureau of Statistics of Labor ; 3 vols. ; first edition: from O. B. Hadwen.

Agriculture of Massachusetts, 1876 and 1877 ; by C. L. Flint ; from O. B. Hadwen.

Hand Book of British Mosses ; Comprising all that are known to be natives of the British Isles ; 24 finely colored plates, with about 200 figures ; 8vo. ; cloth ; London ; Society.

The Amateur's Greenhouse and Conservatory ; illustrated with colored plates and wood engravings ; 8vo ; cloth ; London, 1873 ; Society.

Jamain H. and Eugene Forney ; Les Roses, Histoire, Culture, Description ; 60 Chromo-Lithograthics *d' apres nature* ; 60 *gravures surbois ;* imp. 8vo ; half morocco ; Paris, 1873 ; Society.

Pomological Magazine ; or, Figures and Descriptions of the most Important Varieties of Fruit cultivated in Great Britain ; 151 beautiful colored plates ; 3 vols ; royal 8vo ; half calf ; Society.

The Pinetum ; being a synopsis of all the Coniferous Plants at present known, with descriptions, history and synonyms, and a comprehensive, systematic index ; by George Gordon, A. L. S.; Society.

Transactions of Massachusetts Horticultural Society ; Part 1 and 2 ; from E. W. Buswell, Treasurer.

Schedule of Prizes of Massachusetts Horticultural Society ; from E. W. Buswell, Treasurer.

Curtis' Botanical Magazine ; by J. D. Hooker ; vol. 32 ; col. plates ; London (still publishing) ; bound ; Society.

Florist and Pomologist ; a Pictorial Monthly Magazine of Flowers, Fruits and Horticulture ; conducted by Thomas Moore ; 1876 ; large 8vo; col. plates ; London (still publishing) ; bound ; Society.

Country Gentleman, The ; vol. 42 ; 1877 ; Society.

Gardener's Chronicle, The ; 1877 ; folio ; Society.

American Agriculturist, The ; vol. 36 ; 1877 ; folio ; Society.

Agricultural Gazette, The ; London ; folio ; Society.

Gardener's Monthly, The ; vol. 19 ; 1877 ; 8vo ; Society.

Villa Gardener, The ; 1877 ; 8vo ; London ; Society.

Massachusetts Ploughman, The ; Geo. H. Noyes, proprietor and publisher ; 1877 ; from Geo. H. Noyes.

Report of the Commissioner of Agriculture ; 1876 ; from Frederick Watts, Commissioner.

Sixth Annual Report of the State Pomological Society of Michigan ; from C. W. Garfield, Secretary.

Twelfth, Thirteenth, Fourteenth and Fifteenth Annual Reports of the Michigan State Board of Agriculture ; 1873–1874–1875–1876 ; bound ; from Robert G. Baird, Secretary of Board.

Journal of Horticulture ; a chronicle of the homestead, poultry yard, apiary and dovecote ; conducted by George W. Johnson, F. R. H. S. and Robert Hogg, LL. D.; 3 vols. 30, 31 and 32 ; London ; Society.

Floral Magazine ; figures and descriptions of the choicest new flowers for the garden or conservatory ; by F. W. Burbridge ; new series 1876 ; 4to ; 56 col. plates ; London ; Society.

Revue Horticole ; Journal d' Horticulture Pratique ; E. A. Carriére ; rédacteur en chef, 1870–'76 ; 6 vols ; 8vo ; many col. plates and cuts, (still publishing) ; Society.

All of which is respectfully submitted.

JOHN C. NEWTON, *Librarian.*

HALL OF FLORA,
November 7, 1877.

ANNUAL REPORT OF THE SECRETARY.

To the Members of the Worcester County Horticultural Society :

At a special meeting of the Trustees, on the 20th day of February, A. D. 1876, it was *voted :*

"That the use of the Hall and Library of the Society be tendered to "the State Board of Agriculture, during its country meeting, which is to "commence on the Fourteenth (14th) day of November proximo."

Also, *voted :* "That in the event of an acceptance of this invitation, "there be held simultaneously, in one of the Halls of the Society, a Free "Exhibition of Flowers and Fruits grown any where within the State."

In his Annual Report for A. D. 1876, your Secretary, calling the attention of the Society to the subject, suggested that a public and social *Reception*, in the evening; whereat delegates and visitors might have an opportunity to become better acquainted with each other than would be afforded in the restriction of official intercourse; would be a suitable act of hospitality, gracefully supplementing the formal invitation. That meeting of the *State Board of Agriculture* was duly held, and, in connection with it there was a creditable display of Fruits and Vegetables in your Hall of *Ceres.* The liberal subscriptions of your members, and of some gentlemen whose largeness of heart thoroughly qualifies them for an association that they have too long neglected, provided a Banquet in the Hall of *Flora* which would have done no discredit to a far more pretentious occasion. As an attention without precedent at their meetings, it may have made an unusually favorable impression upon our visitors. That it proved so acceptable to them was, of itself, a sufficient reward for those who originated and realized the idea, and incidentally maintained the fair repute of Worcester.

The official sessions of the *State Board of Agriculture*, for the transaction of its specific business, were largely attended. And, although much, whether of essay or discussion, had no clearly strict relation to our immediate pursuits and studies, yet he must be an indifferent Horticulturist who could fail to derive benefit from the detailed conclusions of those expert and wary observers. No field of research in the broad and almost

boundless domain of Terræculture, can be so alien or remote fro m another, that it shall not readily assimilate the profitable instruction of practical or scientific analysis. Agricola and Horticola are equally interested in all knowledge;—whether it pertains to the mutations of the seasons; the reciprocal influences of forest and rain-fall, of desert and drought; or whether, in an humbler sphere, it limits itself to protecting home industry in the frugivorous bird and granivorous insect. Even Prohibition affects them: warning the grower of countless apples not to feed with them the worm that ravageth ceaselessly, and covering the TURDUS *migratorius* with the asinine shield of an endless *close season.* Literally may they sing, with the Poet:—

> Civis Romanus sum; nihil humani
> A me alienum puto.

That session of the *State Board of Agriculture* was prolific of other and more direct benefit. Under its influence, and largely stimulated by that example, members of your Society were induced to prepare essays upon the propagation and culture of the various Fruits and Vegetables; and to read them at successive weekly meetings, held throughout the ensuing winter. Many of those essays were quite elaborate, meriting preservation in some more permanent form than the columns of a newspaper. Should there be no objection, on your part, the Committee on Publication may think it advisable to incorporate the whole, or a major portion of the more thoughtful of them, in their next volume of Transactions. The Society would not thereby commit itself unreservedly to the opinions of the authors: but it would pay them the decent civility of placing their views before a larger audience, than the exigencies of daily business could permit to assemble at the time of their original delivery. Few might be at leisure to listen to them; comparatively many would "inwardly digest" them off the printed page.

Under the date of February 15th, A. D. 1877, your Secretary received an Official Notification from the Director-General of the UNITED STATES CENTENNIAL COMMISSION that the "Group Judges" had reported in favor of an "Award" to the Worcester County Horticultural Society for its "Product"—"Sixty (60) varieties of Apples" for the following reasons, viz.: "Large and interesting collection of Apples; the following "very well grown :—Leicester Sweet, Winter Harvey, Pomme Water, "Beauty of Kent, Williams's Favorite, Holden Pippin, Porter, Summer "Pippin, Mexico, Roxbury Russet, Gravenstein, Maiden's Blush, Cogswell, "and Primate. Also, for "Salisbury's Seedling," and a seedling from "Northern Spy,—both thought to be worthy of trial." Which Report, the Centennial Commission had accepted, approving its reasons and decreeing an "Award" in conformity therewith.

The next succeeding mail brought another letter from Mr. Goshorn announcing that an "Award" had been recommended and decreed to this Society, as such for "Forty-three (43) dishes of Pears, from seventeen "growers. This collection is one of very great merit, showing the in-"telligent culture necessary to produce such handsome fruit in a very "unfavorable season."

Your Secretary also holds in possession, or qualified trust, a similar Notification from Director-General Goshorn, wherein the "Worcester County Agricultural Society" is informed that it has been adjudged worthy of an Award for "PRODUCT" Pears. As the "Worcester Agricultural Society" made no Exhibit—whether of pears or cabbage-heads—its vigilant Secretary thought that there must be some mistake. In that opinion your own Secretary might readily concur, had he not been fully possessed with the Scripture that men often gather where they have not strewn.

Awards were also decreed to individual members of our Society, as follows, viz.:

William H. Earle, "for six varieties of Pears, all large and well-grown, "including the Bartlett and Beurré Clairgeau, which are exceptionally "fine.

John C. Newton, "for one dish of 'Paradise of Autumn' Pears which "are grown to great perfection."

Newell Wood (Millbury, Mass.), "for one plate of 'Doyenné Boussoc,' "very finely grown—perfect in form and color."

Edward W. Lincoln, "for one plate of 'Beurré Bosc,' and one of "'Washington,' both of which are very attractive dishes of fruit."

Mrs. George A. Chamberlain, "exhibits one dish of the 'Howell,' "very finely grown and exquisitely colored."

O. B. Hadwen, "for one plate of Ananas d' Eté, fine in size, perfect "in form, and beautifully colored."

The Diplomas and Bronze Medals which constitute those "Awards" deserve to be safely preserved, and might well find a permanent custodian in this Society.

The Report of your Secretary for A. D. 1876 contained the following passage:—"Upon one feature of this Pomological Exhibition, however, it would be impossible to enlarge in too strong terms of censure. Massachusetts, Ohio and New York were wholly unrepresented upon the Committee of Judges. The exclusion of their statues from funeral processions in the decadence of Ancient Rome, but served to recall to mind even more vividly the patriots Brutus and Cassius. And who of us, in looking through the roll of those who had been selected to adjudicate upon 'Northern Pomological Products,' could fail to note with amaze-

ment the absence of such names as JOHN A. WARDER, PATRICK BARRY, CHARLES DOWNING, JOHN J. THOMAS, and,—*clarum et venerabile nomen!*—MARSHALL P. WILDER. Honesty is an indispensable qualification for a just judge, but should not capacity also be deemed essential?" The Editor of that invaluable Horticultural Magazine the *Gardener's Monthly*,—invaluable because of its possession of him as Editor,—feels sorely aggrieved by those remarks, and takes exception to their general tenor in language which is quoted in full, that he may receive the hearing to which he is, in every respect, entitled: "It is a remarkable com-"mentary on this paragraph that the utter ignoring of Horticulture and "Agriculture in the programme of judges, and through which no judges "for these departments were appointed, was the work of a *New England* "*Man.* The judges who did serve, did so without any recognition from "the Centennial Commission, and without any arrangement for pay, "while the regular judges had both. They worked steadily at this for "from two to four days a week, for *six months*, and then were told that "as there was no provision made for Pomological judges, their services "were expected to be gratuitous. If Downing, Warder, Thomas, Barry, "Wilder, or that other gentleman, *Clarum E. V. Nomen*, of whom we "never heard before, were willing to undertake this long and weary ser-"vice, out of pure desire as pomologists, to see some justice done to the "great pomological interests, such knowledge of their disposition never "came to Philadelphia; nor we do not know that either Brutus or Cassius "ever did work like this; but if Massachusetts have any of these noble "Romans in these days, she is quite welcome to send some of them along "next time."

"It is also but fair to state that while the pomological judges from "other parts of the country, who were called in during the heavy week "to assist, *by the Commission*, were paid $100.00 for the week's work, "and which they earned much better than some of the regular judges in "other departments, even this trifle was refused to the Philadelphia "judges for six months' work," &c., &c.

To all which the replication of your Secretary, re-affirming his original position, is that the answer of Mr. Meehan concedes everything essential. Whatsoever the sins of commission or omission whereof a "New England Man" (can that intend the "Gentleman in Politics?") may have been guilty, the writer knows not nor cares. Massachusetts, Ohio, and New York constitute a larger territory and a more comprehensive designation. Sectionalism is the last fault that your Secretary ever supposed would be ascribed to him.

That the judges who served were not "recognized" by the Centennial Commission; that they were not paid while others, of no more conse-

quence, were; that they were worked like pack-horses, while needed, and thereafter turned out to grass; was never asserted by the writer, because the facts were not known to him; is not now doubted, because it is proclaimed by Mr. Meehan: but is not absolutely stated since, even if true, it would be immaterial to the precise issue. The *gravamen* of the charge against the Centennial Commission, in these Reports, was that such representative men as "John A. Warder, Patrick Barry, Charles Downing, "John J. Thomas, and,—*clarum et venerabile nomen*,—Marshall P. Wilder; "were not selected to adjudicate upon '*Northern Pomological Products.*'" For the Circular from Philadelphia was sectional in that it invited competition solely from Northern Pomologists. Mr. Meehan admits that his colleagues and himself served without "recognition." Were they also self-constituted Judges—*without invitation?* But it is added that no knowledge ever came to Philadelphia of the willingness of Downing, Warder, &c , &c., to undertake this long and weary service. Why should it, when these gentlemen were not asked! The truth is,—and all the casuistry between the Delaware and Schuylkill cannot confuse it,—that the actual judges did their work well. But that it might have been done better, is only a just and legitimate inference from the peculiar composition of the bench which assumed or undertook the task. Pennsylvania may have originated the *Seckel* and *Tyson:* yet Massachusetts challenges her for superiority of specimens. A back-yard in Girard Row developed the *Brinckle's Orange Raspberry:* but it is quite neglected in its birth-place, although growing and yielding to perfection in this city of Worcester. Here is the home of the APPLE; of the *Leicester Winter Sweet*, and the *Washington Royal;* of the *Holden Pippin* and the *Mother;* of the *Sterling* and the *Hubbardston Nonesuch.* Shall we have to recite the origin, within an hour's journey, of the ROXBURY RUSSETT, the BALDWIN, or the RHODE ISLAND GREENING? Cannot a country that will produce such fruits, grow "noble Romans" also, might have been a pertinent inquiry, it would seem, for the CENTENNIAL COMMISSION or even the Tail-Centre of the "Bureau of Agriculture"!

Au reste! Mr. Meehan is facetious; poking fun at defunct Romans. He is not ashamed to confess his ignorance of the nature of their "work" when in the flesh. Might he not take it for granted, if only because of their fair standing in the community, that they were engaged in Civil Service Reform? If Virgil could pen the Georgics, but a few years later, why assume so coolly on the strength of "what we do *not* know" that the noblest Roman of them all never "did work like this"! "*Facilis descensus Averni!*" May they not, now at least, thoroughly comprehend the application of bottom-heat?

Neither, in his calm Bæotia, has he ever heard of "*Clarum et venera-*

"*bile nomen.*" But that is attributable to his individual modesty, real or feigned: since, *mutatis mutandis*, any child in Germantown could readily designate "*Clarum;*" and "*venerabilis*" is presumed, not unreasonably, to have been the chief object of his own recent visit to the South of England and the Channel Islands.

Finally, it may do no harm to Mr. Meehan to be informed that, in no community are his botanical labors more highly appreciated than in this, which must be suffered to keep its eyes open yet a while longer to the shortcomings of the Centennial Commission. Years have elapsed since it was the privilege of your Secretary to move the enrolment of Mr. Meehan among the HONORARY MEMBERS of the Worcester County Horticultural Society. That action of his, meeting as it did with your unanimous sanction, has never been regretted. We can surely hope that "honors are easy."

Circulars were received by your Secretary, in close and frequent succession throughout the winter of A. D., 1876–'77, wherein a person subscribing himself "*Gen.* C. B. Norton, Late Secretary of the Bureau of the Centennial Board of Finance," offered to frame Diplomas for a consideration in money. Individual members, and even the MASSACHUSETTS HORTICULTURAL SOCIETY, were the recipients of similar communications. It is inconceivable that the Centennial Commission should lend itself to such jobbery. And yet, how otherwise can we account for the delay in transmitting the Diplomas and Medals; unless by adopting the absurd supposition that the Mint, and the American Bank Note Company, whose facilities have been regarded equal to any demand, proved inadequate to the stress of this moderate exigency!

At a special meeting of the TRUSTEES, convened in the Hall of *Flora*, upon the 21st of April, ult., on motion of Hon. George W. Richardson, seconded by *ex-President* Francis, it was *Voted*:—"That the Secretary be "authorized to procure a portrait of the late Governor Levi Lincoln, to "be placed in the Library, of similar size and style to those of John Mil-"ton Earle, and Daniel Waldo," now in the enjoyment of the Society.

It was an unalloyed pleasure to execute that commission. The portrait has been procured and is suspended in this Hall of *Flora*. Of its merits you must be the severe judges. But it may not be improper to add, in relation to its value as a likeness, that it fully meets the hopes and anticipations of those who held him dearest in life, and to whom his lineaments were most familiar.

There can be no adornment for these walls so appropriate as the Portraits of our Worthies. Towns and cities run economy into the ground, —for compost forsooth;—and cannot afford such extravagance. But

wherewithal shall it profit the Worcester County Horticultural Society to save up income, and starve its taste for beauty and its appreciation of all the nobler sentiments? Your Secretary would earnestly commend to your consideration the propriety of securing, next in succession, a likeness in oil of the late Frederic William Paine. His name may not be familiar to our younger members. But the faithful historian of the Society will mention him as one of the Original Corporators,* and as the Treasurer of the Corporation, from its earliest organization until his death in A. D. 1869. To his fidelity and honesty may we largely attribute our present prosperity. And to no virtues, in these days of reckless or dishonest management of trusts, could an enduring memorial be more fitting.

The VERNAL EXHIBITION of the Society was unusually successful. Occurring, as it does, when the severity of Winter is rapidly relaxing, that Exhibition seems to meet the want of our natures in their impatient anticipation of bud and flower. The attendance is always large, and was especially so upon this occasion. The *Cyclamen* proved a leading attraction; showing that the efforts of the Society to encourage the cultivation of this charming house-plant are beginning to be crowned with success. Very noticeable were some seedlings of Mr. Auguste Le Duc (gr. to P. L. Moen, Esq). A specimen plant from Hon. Stephen Salisbury was also conspicuous, with its profusion of bloom. Some shapely plants of *Azalea Indica* appeared upon the tables, as if to show that their production may be independent of the offer of Premiums. For long years did your Secretary vainly proprose an award for the best six Azaleas. No sooner was that cup otherwise bestowed than the Azalea, so shyly coy, puts in its blushing appearance. It is to be hoped that a plant of such exquisite beauty, which is so much easier to grow than the multitude with which our ladies choke up their windows, may at last command the earnest devotion that it never failed to merit.

The *Weekly Exhibitions* of the Society were resumed, after the unfortunate intermission of a year, and have been continued throughout the summer. Sparsely visited at first, the attendance upon them gradually increased until, towards their close when the ANNUAL AUTUMNAL EXHIBITION was imminent, the Hall of *Flora* seemed too contracted for their convenient accommodation. It is not the easiest thing to resume habits and practices long laid aside. But enough was accomplished, although our fair florists did not appear in quite their pristine force, to make it evident that, in this direction lies our path of useful progress. So only, in fact, can the Floral Department of Horticulture receive, at our

* There were but four (4) named, in all:—John Green, Anthony Chase, Frederick William Paine and George W. Richardson.

hands, its meed of equal and exact justice. Flowers are perishable and their beauty and fragrance evanescent. A few species may present an almost changeless charm, for successive exhibitions, but ordinarily the laws of Nature are inexorable, constraining the lovers of continuous bloom to cultivate a variety that they would not otherwise affect. And that constraint, carrying with it burdens of its own, it should be our privilege and pleasure to recognize and alleviate, so far as may be within our power.

Do we then offer a sufficient pecuniary recompense for the earnest interest and zeal to which we are so often indebted for the attractiveness of our Summer Exhibitions? For that visitors are drawn thither by Plants and Flowers, and not by Fruits, as a rule, must be obvious to the most casual observer. Yet worthily to fill one of our Flower-Stands which, in our aim at the highest excellence, is the sum of our present requirements, compels our contributors to sacrifice their daily, home enjoyment. Their best specimens must be ruthlessly severed; to be spoiled in all likelihood; upon which otherwise their eyes might have gazed until

"Dazzled and drunk with beauty."

Hours must be spent in displaying them to the best advantage, for is not skill in arrangement to be considered in the decision of relative merit? The plaudits of visitors are bestowed upon contributors, should the weather be pleasant enough to coax their attendance; and no counter attraction solicit, of stronger magnetism. But what return is made by this Society for so much devotion and toil? Why, the barest pittance to but two (2) out of any possible number of competitors; and not even the diplomatic assurance of our distinguished consideration to those who fail. Possibly a winner, with more than ordinary luck, might gain enough in the course of a whole Summer to justify the purchase of a barrel of Poor-Farm flour; but, even that, only by a stern self-denial of those higher grades whose excellence is so extreme as to compel reduction. Certain it is that no fortunes are to be saved up, from the Floral Premiums at our Summer Exhibitions. Nay, it is even doubtful if their aggregate sum would more than satisfy the original outlay for Flower-Seeds Your Secretary would rejoice, beyond measure, could he impress the TRUSTEES, with whom lies the establishment of Premiums, with his own views upon this especial matter. Fore-casting the future, he anticipates a period, not remote, when the lean kine and the scrub-race will cease propagation and propulsion, and there will no longer be occasion or place for an Agricultural Society—*strictly such*—in the City of Worcester. When the Town-Lots will be covered with dwellings, the chaste homes of the political elect, who are all Hayes Republicans, all Skillings Democrats! Then

indeed will *Horticulture*, its Apple and Pear Orchards destroyed, its Currant and Strawberry Plantations extirpated, see and own its dependence upon the Florist, from whose co-operation and support, only, can it derive any assurance or hope of ultimate prosperity. The window-garden will endure so long as the sun shines and woman has a roof to cover her head. *Our* constituency bid fair to last through all time; the pertinent question is—have we the wit and will to learn and heed its instructions? The world would miss its flowers; but a Horticultural Society, neglecting or false to its mission, might die and leave no sign.

Of course, no Premiums that we might incline to propose, and which the condition of the Treasury would justify, could remunerate our fair contributors for the devotion to our service of so much labor and time. But the offer of them would make our thorough appreciation more clearly evident; and that, in itself, would go far as an incentive. As it is, we expect and feel aggrieved not to find exhibited the latest novelties; forgetting that we may exact too much from limited means and still more straitened opportunities. "To him that hath shall be given," may answer for Christian philosophy. But it should be a fixed and vivid impression in our minds that *Flora* is a heathen goddess; to whose worship we must individually contribute, that the smoke of the sacrifice may ascend within her shrines. A judicious revision of our Premium-Schedule, by which any superfluity assigned to the purposes of our ANNUAL AUTUMNAL EXHIBITION shall be diverted to the more ample and satisfactory maintenance of Floral Exhibitions throughout the late Spring and Summer, commends itself to my deliberate approval and is most earnestly advised.

The *Summer Exhibition* of ROSES and STRAWBERRIES was a repetition of that of last year, in one of its most important features. The books of the Secretary contain the following record under the date of June 29th, A. D. 1876:—"There was no entry of roses, and of course no award." Should it be urged in explanation of this utter failure, that the Exhibition was held, in 1876, at too late a date for such a perishable flower, the reply is ready that there was but a single exhibitor in 1877, when the character of the season was such that the competition, in the class of Roses, had to be anticipated upon the 21st of June. A solitary stand, comprising thirty-one (31) named varieties represented the only attempt to fill this abhorrent vacuum in nature. What has caused such evident neglect of the Queen of Flowers in recent years, by the florists of this Society? So late as A. D. 1874, and upon the 2d day of July at that, there were five separate stands of ROSES, by as many different contributors, not to mention the numerous vases and bouquets of that delicious flower. It cannot be indifference or lack of appreciation. Is it laziness,

that contents itself with the cheap thrift of Coleus and Geranium and declines an arduous contest with pretty much the entire insect-plague? But then, why not plant and grow the Rose in the faith of *Rusticus*, as expressed through his Committee in the General Court; trusting blindly to the *English Sparrow* and the *Turdus migratorius*, and saving the sweat of the brow for nocturnal wrestling with the arduous "work" of the Grange! That industry which will not try to rescue the Rose from its numerous foes, must necessarily fail to maintain an advanced position in the ceaseless strife which the forces of Nature are ever waging to deteriorate and impair. The florist who ignobly abandons the culture of the fittest, need not expect that its survival will be measured unto him in the vicissitudes of the seasons. And he must be prepared to take an inferior rank, in his profession, who contents himself with *Caladium* or *Lycopod*, neglecting or indifferent to that perfection of beauty and fragrance which, from the dawn of history, have established the ROSE, without compeer or rival, as the very Queen of Flowers.

The display of STRAWBERRIES, throughout their season, was unsurpassed in our experience as a Society. Varieties have been shown for as many successive weeks, it is true ;—notably the Triomphe de Gand, years since, by Mr. Charles Richardson. But at no time were we ever privileged to inspect so many different kinds—nearly all good, if of relative degrees of excellence. Nature had been generally propitious, a deep mantle of snow protecting the plants, and timely though light showers encouraging and forcing production. The Colonel Cheney and Monarch of the West merited and received the attention claimed for them by their skillful grower on "Sunnyside ;" and the "*sports*" from "Pine Grove" betrayed no evidence of deterioration. Later experience has, however, shown pretty conclusively that for general cultivation, in this vicinity, little is to be gained by a search for anything better than the Charles Downing and Jucunda. The white tip of the former is prejudicial to it, in the hasty judgment of one who beholds it for the first time, in ignorance of its real merits. Nevertheless, considering its quality and the facility wherewith it adapts itself to all localities, to the Charles Downing must be accorded precedence among early Strawberries. In addition to which it continues to bear until a fastidious palate craves a change of variety. And that is supplied, in unrivalled excellence, by the Jucunda. This superb berry, grown in hills, here and there occasionally in rows, kept free from runners and with the ordinary abrasion and waste of soil annually restored, is absolutely peerless. In its possibilities of universal dissemination, it is perhaps inferior to the Triomphe de Gand ; but its symmetry of form and less peculiar flavor will always command the palm

for the Jucunda. Upon our clayey soils its cultivation, with reasonable attention and industry, should invariably result in success. What it can do, in the hands of those who have striven the most to develop it, in Worcester, was manifested upon the 28th day of June, ult., when Mr. F. J. Kinney exhibited fifty (50) berries whose weight was three (3) pounds; and Mr. Wm. H. Earle displayed a quart box, containing thirty-two (32) berries that tipped the scale at two (2) pounds and $\frac{1}{4}$ ounce.

Meanwhile due credit should be allowed to those enterprising growers who, whether from zeal for the advancement of Pomology, or the love of shekels, try all things that are introduced—holding fast to that which seemeth good. And who are possibly a little too tenacious of that which has hitherto only been *proved* good upon their own limited grounds.

The Strawberry season, as a whole, may be pronounced a success. It is true that excessive heat early in June stimulated the crop, but timely rains came to its aid, and secured the maturation of the berries. So far as the market was concerned, the middle-man complained that the Granger was slack in the supply of his necessities, and that the Sovereign of Industry failed at his sorest pinch. And this on the 22d day of June, after our Annual Exhibition had been held. At that date, the Charles Downing was noted as most abundant;—the Monarch of the West being next in force. But all deficiencies, in such respect, were more than made good by the slaves of toil, whose motto is "live and let live!" and who look upon an open countenance as the most apt and genial introduction to an empty belly. Strawberry short-cake may pall upon a satiated appetite, but he need never be short himself who can supplement cake enough with unfailing strawberries. And of such is the amateur Fragarian, inspired by the example and instruction of this Society.

Many years have elapsed since your Secretary began to inculcate, through the medium of these Reports, a wider cultivation and encouragement of the *Raspberry*. The bread thus cast upon the waters returned indeed after many days: but only Black-caps constituted the flotsam and jetsam. But, during the summer just passed, our tables bore striking testimony to the value of that final perseverance enjoined upon the saints. Noble displays of the Clarke, Brinkle's Orange, Northumberland Fillbasket, Hudson River Antwerp, and the Hornet, were all that could be required by the most exacting. Such fruit, if grown for the market, will create a demand where none existed before. If produced for home consumption, alone, it will supply an amount of wholesome and dainty nutriment, during the languor and oppression of dog-days, for which there can be no substitute. And, as for ruinous competition with the local supply, the fruit itself is too perishable to bear carriage for considable distances.

The Horticultural Society of New Jersey reports that the Herstine and Clarke, at first supposed to be hardy, are really tender and of little value for the market; which, of course, leaves unaffected their worth for the table. That Society adopts the Doolittle and Mammoth Cluster for Black-caps; and the Brandywine and Philadelphia for Red varieties. This list curiously illustrates one point upon which your Secretary has never failed to give warning alike to the sanguine or inexperienced:—the matter of hardiness. He lays it down as an axiom that no variety of *Rubus Idaeus* will survive the winters of New England and yield profitably, *without protection.* They richly merit it; but the cultivator who cannot or will not bestow it, might as well give up the idea of growing Raspberries. The canes may endure for one or two seasons, apparently uninjured; but their constitution is impaired and the crop surely diminishes in proportion to this loss of vitality.

Of the kinds above specified as exhibited upon our tables, all, with the exception of the Clarke, are of first-rate quality. The Hornet is a new comer among us, and its adaptation to our soils remains to be tested. In all other respects, it brings with it a character from the skillful cultivators of our own and sister States, that leaves nothing to be desired.

The newspapers of the day, in their haste of publication and zeal to gather the earliest intelligence, are very apt to mislead. Especially is this the case in Horticulture,—a science, if such it may be called, peculiarly tentative, and whose every hazard ought not to be accepted as an exact and legitimate result. Thus, one journal,* which has ever shown a deep interest in the welfare of this Society, gave currency to the curious statement, during the last summer, that it "had specimens of second "crops of 'Davison's Thornless Black-Cap Raspberry,' and of the 'North-"umberland Fillbasket Red Raspberry,' grown in the grounds" of an active and enthusiastic pomologist, who "tells" the editor that "these "second crops are as regular and certain as the first crops." What miraculous effect might be produced upon a variety, by its simple translation from Oak Street to the Holden Line, could not be predicted by your Secretary when giving to his friend those plants of Northumberland Fillbasket. But, as they had never borne a second crop, while under his own care; nor lived so riotously in their original plantation; he may be excusable for not suspecting, much more detecting, such latent, unprecedented fecundity. Surely, some check should be imposed upon their exuberance, lest they yield still a third crop upon February 14th, or even a fourth upon the *First of April!*

CURRANTS were shown in fair, although not unusual, quantity. There is no decent excuse for the common neglect of this hardy and wholesome

* The Massachusets *Spy*.

fruit. If the average Yankee family would grow more currants it would not have to buy so much anti-cholera mixture. The bowels of children who are permitted to pluck the ripe fruit from the bushes will require no other regulation than that of Nature. The ravages of the currant worm, (*Abraxis grossulariata*), easily restricted as they are by the timely use of White Hellebore, have ceased to awaken apprehension. Why then should not the pomologist throw off this lethargy and, abating neither jot nor tittle of his interest in Strawberry, or Pear, resume the cultivation of this preëminently domestic fruit, than which, in its season, no other can be named so appetizing and welcome!

The series of experimental trials of known varieties of the Currant, and of those reputed to be varieties, referred to in my last Report as inaugurated by the Royal Horticultural Society of England, in its gardens at Chiswick, were continued during the past season. The conclusions of the Fruit Committee are of so much importance, discriminating as they do carefully between the true and false, and enabling us to guard against the reception of spurious varieties which the greed of dealers or their agents is ever seeking to distribute, that their official Report is reproduced in its concise and conclusive brevity.

RED CURRANTS.

"These were examined with great care as to their nomenclature, so "much confusion still existing among them in that respect. Of the most "approved varieties noted, the earliest and the largest is the RED "CHERRY, which has the following synonyms, viz.: Bertin No. 9; Grosse "Rouge de Boulogne; Fertile d' Angleterre; La Hâtive; La Fertile; Fer-"tile de Bertin; Hâtive de Bertin; Chenonceau; Belle de St. Gilles; "Fertile; Fertile de Palluau; and La Versaillaise.

"The RED DUTCH, which is the variety most generally cultivated in "gardens, rejoices in the following synonyms: Knight's Large Red; "Knight's Sweet Red; Goliath Fielder's Red; Palmer's Late Red; Pit-"maston Red; Pitmaston Prolific; Large Sweet Red; Bertin's No. 1; "Dancer's Selected; and Jackson's Mammoth.

"The RED GRAPE, a large bunched sort, of a pale red. Synonyms: "Rouge Transparent; Queen Victoria; Fertile de Palluau.

"HOUGHTON CASTLE, the best constitutioned variety. Synonyms: "Houghton Seedling; Orangefield.

Lost in this Ribearian Babel, well may the perplexed pomologist exclaim, in the slang of the showman: "just as you like, you little dears. "You pays your money and you takes your choice!"

THE AMERICAN POMOLOGICAL SOCIETY has failed to take decisive action in this matter, leaving the grower of Currants to call his fruit the

Cherry, or La Versaillaise, as either name may best suit him, yet neglecting to warn him that they are but synonyms, after all.

The Plague of INSECTS was never more grievous than during the year just expiring. Whether due to the dryness of the earth, which was thereby kept from freezing to any considerable depth, and to the dense covering of snow that prevented the usual alternations of frost and thaw in the Spring; certain is it that orchard, and forest, and land seemed utterly a prey to the *Canker-Worm*, the *Curculio*, the *Tent*, and *Web Caterpillars*, and the *Colorado Potato Beetle.* And most discouraging of all was the too evident neglect of obvious precautions against this invasion by our leading terraeculturists. They would spend hours, or days, perhaps, to secure a crop of potatoes, by hand-picking; nourishing the Yankee conceit which cannot make use of Paris Green because its suggestion and effectual test cómes from the Western Nazareth; but their Orchard and Forest trees were denuded of leaves, before their very doors, and not a hand was raised to stay the foe. As it was here, so everywhere. A writer from the Western part of the State, says: "the Web-Worm spe-"cies of the Caterpillar is very abundant this Summer, more so than for "years. Apple-trees, Cherry-trees, Butternuts, Alders, White-Birches, "and almost every species of tree or shrub show these webs. They are "not as voracious eaters as the Tent Caterpillars; yet they make bad "work when so plenty as they are this season."

But, it may be urged, both Agricola and Horticola have been members of the Great and General Court. They remembered the consistent legislation which has protected *Birds;* and doubtless felicitated themselves upon the acute prescience that provided for the guardianship of flower and fruit by beak and talon. That your Secretary is a thorough sceptic in this particular, you have not now for the first time to learn. That scores of your associate members share in his unbelief will not astonish you. But you may not know how wide-spread is this distrust of Birds as an insect-destroying agency, and will not object, therefore, to be better informed in the premises. Says a farmer in Maryland, after enlarging upon the pains that he had been at to shelter and save every species of birds: "I can say with truth that the birds build in every tree on my lawn, "and there are myriads of birds here, and myriads of Curculios, and "myriads of cherries; and nearly every one of the myriad of cherries is "stung by the Curculio, and all the plums and gages, most of the apples, "and many peaches and pears. The large fruits do not seem to mind it, "but the puncture leaves a knot in the fruit which hurts the sale."

If he makes the acquaintance of the Codling-moth, he will find that the "large fruits" are not so phlegmatic. Another writer, in the Country

Gentleman, narrates his troubles:—"The BIRDS are the great destroyers "of small fruits. They take a part of our best Strawberries, they have "nearly swept the Gooseberries, and they have not permitted us to pick "a single ripe Blackberry in three rows of bushes. The Grapes are yet "to take their chance. The Currant-worm is the only insect worth nam-"ing that touches our small fruits, and is effectually destroyed with very "little labor. It is difficult to say what we shall do with the Robins. We "would rather meet all the insect enemies of fruit, (leaving out the Ap-"ple and Pear,) than the single species known as Merula Migratoria. "Destructive Insects and Destructive Birds have both increased together, "and without great vigilance the fruit has a hard time of it."

But says Tityrus, as he lounges idly

Sub tegmine fagi.

you have the Sparrow and need not care for the lack of relish for Insects manifested by the *migratorii*—whether Merula or *Turdus*. Truly we have the Sparrow—no thanks to those who introduced him from the "effete despotisms!" And what his character may be, among those who have had him longer and know him only too well, is thus pithily described in the Gardener's Chronicle:—

"A few months ago we reproduced some remarks from the *Bulletin* of "the French Acclimatization Society respecting the 'RAVAGES COMMIT-"TED BY SPARROWS IN ALGERIA,' where, it appears, they are exces-"sively numerous. Nevertheless, it is illegal to destroy them, and they "go on increasing at an alarming rate. In a recent number of the publi-"cation already named there is another letter on this subject, urging the "necessity of authorizing and even encouraging the destruction of these "voracious and prolific birds. Wherever there are woods or plantations "of trees, there the Sparrows assemble in incredible numbers. One "writer goes so far as to deplore the introduction of gum trees [*Eucalypti* "E. W. L.], because they harbor the Sparrows, and it is difficult to dislodge "their nests from those slender, lofty trees. Now, it is stated that on one "estate alone 200 acres of Rye were so completely devoured by the Spar-"rows before it was ripe that not a single corn was harvested; and it was "calculated that in a neighboring wood, some 150 acres in extent, there "were 284,000 nests. One colonist complained that the Sparrows had "carried away 2 tons of his hay; and from the average weight of the "nests weighed it was estimated that 10 tons of hay were carried away to "construct these 284,000 nests. Further, it is asserted that this same "wood which consists mainly of the Aleppo Pine, is annually infested "with Caterpillars to such an extent that it is dangerous to go through it "in the months of March and April, because the Pine Caterpillar is ven-"omous."

The Commonwealth is to be agitated from centre to circumference, and suffered no rest, because men will take thought of what they shall drink. But none stop to consider the hopeless waste occasioned by our Insect Foes; solacing themselves with the idea that the loss must be trivial because of the apparent insignificance of its cause. Grave legislators devote weeks to an analysis of the scratches upon the backs of our scamps at Westborough: but no concern is awakened by the pitiless invasion of crawling and winged creatures, whose countless myriads mar the face of nature, devastating it to a barren waste. "Am I *not* my brother's keeper?" We make light of the Colorado Beetle and point to the immense crop of potatoes grown in his despite. But who take account of the multitudes that have resolved to give up their cultivation, allowing the last brood of beetles to hybernate without any effort to reduce their swarms! The earth teems with them. Should Nature spare them and man despise them — what then? "Let them eat cake!" said the French Queen, when told that her subjects starved for lack of bread. In default of Plums, the Curculio finds occupation with Cherry and Peach. The Canker Worm is fairly domesticated. Can there be a doubt that the excessive voracity of the Colorado Beetle will find something wherewith to gratify itself; the cultivation of the Potato being omitted for a season, and all attempts to exterminate him having been neglected? The old Romans had a proverb that "a word to the wise is sufficient." Yet how if they are wise but in their own conceit?

It has been exceedingly pleasant to note the re-appearance of the PEACH, at our Exhibitions, in goodly numbers and in all its pristine excellence. Those of us whose memory ran back for a generation could recall the time when the Peach and Apple orchards of Worcester County were trusted for a harvest, with an assurance that was never disappointed. The virgin soil nourished trees stout in girth, and of limb sufficient to support the boys of the neighborhood, to whom it never occurred that such temptations were meant to be resisted. The trunks were healthy, the limbs vigorous — the foliage without blemish or curl. The *Cooledge* and *Crawford*; the *Large Red Rareripe* and the *Red-Cheek Melacoton* were borne in a profusion as grateful as it was generous. That this race of trees died of exhaustion,—consumption perhaps, by analogy,— cannot be doubted. Propagated from the bud they could only transfer an impaired vitality. As their stones were not sure to perpetuate their kind the variety itself might be lost. So that when, in addition to these obvious, if more or less evitable perils, was superadded the fearful frost of A. D. 1861, it is not much to be wondered at that the home-grown Peach should have become a theme for tradition. That frost, of—30 degrees Fahren-

heit,—decimated the Cherry trees and almost exterminated the Peach orchards that still lingered in existence. The few which escaped entire destruction, from propitious conditions of shelter or otherwise, were so far weakened as to fall an easy prey to the *Yellows*.

But, within a few years, it has become rapidly evident that this exquisite fruit is not longer to be neglected by the Pomologists of Worcester County. Shrewsbury, which so constantly challenged competition, may sulk and withdraw from the lists, contenting herself with past honors. But Millbury and West Boylston step to the front, and—scarcely in their rear—the Shire presents its Seedlings. Trial has not yet proved if the Singletary of Mr. Newell Wood will perpetuate itself, from the stone. The superior Seedling of Mr. William H. Willard is reputed to endure that test successfully. The very promising Seedling of Joseph C. Lovell and Benjamin Walker* merit further and thorough trial. The ground has long lain fallow and may have regained its original elements. Science, too, has advanced; and the wit of man may, quite possibly, replace and restore what was wasted by shiftlessness and unthrift.

But, if the Peach failed to yield of its increase, and was apparently threatened with extinction, our Pomologists would not yield to despair. The Concord Grape had been originated, so timely, as though its production were of itself intended to indicate the infinite possibilities which it provoked. At our late ANNUAL AUTUMNAL EXHIBITION, there were One Hundred and Four (104) Plates, comprising Thirty-Eight (38) varieties of Grapes, grown in the open air without other protection than the chance shelter of cornice or tree. Substantially ripe, their developement was due to no artificial cause. Just thirty (30) years since, A. D. 1847, when the lamented A. J. Downing published his invaluable work on "The Fruit and Fruit Trees of America," the refined gold of which subsequent editions have but served to gild, he could find only the Catawba and Isabella as objects of decided commendation, although the Diana was "said to be of superior quality." His estimate of the actual condition of Viticulture, at that period, with his bright outlook for the future, is, like all which proceeded from his pen, well worth your renewed attention:

"The varieties of native grapes at present grown, are chiefly either the "finer sorts of wild species, or, which is most generally the case, they are ac- "cidentally improved varieties, that have sprung up in woods and fields "from wild vines. They are, therefore, but one remove from a wild state, "and, as extensive trials are now being made by various cultivators to pro "duce new varieties from these, there is little doubt that in a few years we

[*NOTE.—Mr. Walker disclaims all knowledge of the Peach shown in his name, or any connection with it. It was brought to the Society from the Office of the *Evening Gazette*, and, by whomsoever originated, merits, as stated in the text, further and thorough trial.—E. W. L.]

"shall have many new native sorts, combining the good qualities of the best "foreign grapes, with the hardiness of the indigenous ones, and with also "the necessary adaptation to the various soils and climates of the United "States."

In the original edition, eleven and one-half (11½) pages were devoted to the methods of culture and the description of varieties of Native Grapes. And of such varieties, but thirteen (13) were deemed worthy of specific designation. In his latest revised edition of what he has made almost a new work, our learned associate, Charles Downing, devotes thirty-four pages to the subject of Grapes (of out-door culture), and enumerates one hundred and forty-five (145) separate varieties. At our ANNUAL AUTUMNAL EXHIBITION, in the current year, Mr. Joseph C. Lovell, of West Boylston, who has done more than our other members combined to test the comparative value and qualities of Native Grapes, and whose only recompense will most likely be the satisfaction of knowing that his work has been done thoroughly and well, placed upon the tables of the Society specimens of twenty-seven (27) varieties, grown by himself. Present difficulties there are in plenty, and others will doubtless offer to perplex and discourage the future Vine Grower. Nevertheless, the progress hitherto achieved supplies every encouragement, and lends ample assurance to the hope that the GRAPE may, ere long, yield as sure a harvest under the changeful skies of New England, as the Apple and Pear—those pet products of a century of careful developement.

By way of contrasting a quite general unfortunate experience in our own vicinity, with that obtained where the open-air cultivation of the Grape is supposed to be pursued under greater difficulties, a curious statement of the *Gardener's Chronicle* (Eng.) may deserve your notice:

"It is a somewhat remarkable fact," says that accurate observer, "that "the VINE MILDEW seldom displays itself on vines grown in the open "air. Does this arise from the hardier nature of these exposed vines, or "does it follow because they are grown in a pure, free air? We have "lately seen in rural districts, large quantities of Grapes produced on "cottages; the culture being of the rudest, and the roots finding food "amidst those of trees, hedgerows, flowers, and indeed where and how "they can—yet not a trace of the mildew could be found."

"*O! si sic omnia!*" is the despairing wail from the Viticulturists of Oak and Westminster streets. And yet that we may magnify even this evil, might be inferred from the language of the (London) *Garden*, in a parallel case, when, referring to the French Vineyards, it says:

"The Vine Growers in France are always complaining of Phylloxera, "or Oidium, or bad crops,—any excuse to keep up the price of wine. But "they will be much embarassed to find any cause for grumbling this year,

"as the yield will, it is said, be the most productive that has been regis-
"tered during the present century."

If the Phylloxera is becoming of little account in Europe, how shall it be worth our while to borrow trouble, here in America, about lesser afflictions? "Fret not thy gizzard!" once exclaimed the late Prophet of the Latter-Day Saints, as he was expressing the essence of modern philosophy.

Several of the *newer* Pears were exhibited by some of our members, at the ANNUAL AUTUMNAL EXHIBITION, as grown by themselves for the first time. The *Dr. Reeder*, of Mr. Moses Church, were small, sweet, of a flavor not unlike that of the Rostiezer, while less attractive in appearance than even that dull variety. The Chairman of the Pear Committee failed to identify his specimens as *Marie Louise d' Uccles* which they were generally considered. Having latterly turned his attention to a study of the theory, in connection with the practice of natural selection, in its most genial aspects, involving the affinity of species in its closest relations, it is to be hoped that he will hereafter make more account of a family record and pedigree.

The variety that your Secretary procured from Messrs. Ellwanger & Barry, for "*Souvenir du Congrés Pomologique*," and the scions of which he distributed quite freely, has continued to puzzle the very elect. Beyond a pardonable curiosity to know what we have, we need scarcely to concern ourselves on account of that which we certainly have not. The *Flore des Serres*, vol 20, pp. 66, thus reconciles us: "Souvenir du Con-
"grés Pomologique;—(Morel). Pear of first quality, ripening during
"August. Tree very productive. Fruit very large, often enormous.
"This Pear is yet a study, and Pomologists are not decided as to its mer-
"its. For ourselves, it is rather of the secondary quality, although good
"enough." But that which is merely "good enough" in Belgium, will not satisfy us in America, who accept the better in a struggle for the best.

Mr. Velette P. Townsend exhibited *Earle's Bergamot*, as usual, but in perhaps superior developement. The Pear Committee restrain themselves from expressing the mingled hope and trust that possess them, after a longer observation of this seedling. Their very confidence makes them cautious. For this reason they have discouraged its exhibition elsewhere, believing that it should first be thoroughly tested, in different localities and soils, in this place of its nativity. It succeeds admirably in Quinsigamond—yet it might fail upon Olean street, in competition with the Belle Lucrative, to bear so early or for so many months in succession.*

* Reference is intended to the unique claim advanced by Mr. F. J. Kinney, in behalf of his Belle Lucrative which commence so early and continue so late in bearing that, were they as good as fruitful, he would consider "Pear" and "Belle Lucrative" synonymes, each of the other. Oh! the Ugly Ducking!

At one of our more recent *Weekly Meetings*, *Vice-President* Hadwen displayed a number of Seedling Pears which he had received from Messrs. F. & L. Clapp of Dorchester, in this Commonwealth. These gentlemen have achieved a reputation as Pomologists that they are not content simply to maintain. The production of *Clapp's Favorite* might, it would seem, satisfy any reasonable ambition. Not so with them. They may not devolop another pear to surpass or even rival that superb summer variety; but, they can try. And hence the seedlings upon our table on the 25th of October. Specifically, there were: "*Nicholas*, a seedling "from No. 17;" "*Newhall*, a seedling from No. 12;" "*Seedling*," (not named,) "from Winter Nelis;" *Seedling* from Urbaniste." The duty of minutely describing these Seedlings may well be left for the accomplished experts of the Massachusetts Horticultural Society, whose observations of them with others from the same orchards, can be continuous and uninterrupted. Abrupt inferences from a single cursory inspection would hardly be warranted. It is, however, permissible to say that the Seedling from Urbaniste was of exquisite flavor, the flesh being of a *beurré* and melting texture. The Seedling from the Winter Nelis would perhaps rank next, if indeed any inferiority was marked.

Depredations upon the gardens and orchards of our members have been scarcely as serious as in former years. Your Secretary learns, from the Commission charged with their care, that the PUBLIC GROUNDS of the City of Worcester suffer from a wanton or malicious mischief which revels in the destruction of whatever is beyond its capacity for enjoyment. But the Horticulturist has mainly escaped ravage; even though, in frequent instances, the flagrant exposure of Quince or Strawberry has seemed to be a temptation of Providence—let alone the graduates of our Reform Schools. In fact, our associate, Mr. Charles Goodwin, claims that his fate has been that of the late Southern Confederacy:—in that his prayer to be "let alone" was not answered. But possibly neither the Confederacy, nor Mr. Goodwin, sufficiently realized that it is the prayer of the righteous that availeth much. Your Secretary tried to console Mr. Goodwin by reminding him of the instance, mentioned in the Good Book, where a pair were grinding and one was taken,—the other being left. But Mr. Goodwin denied that there was any grinding in his,—grist and toll alike were taken, and not a pear was left between his upper and nether stones. Be that as it may!

For our general immunity we have, perhaps, to thank our associate, Mr. William H. Earle, to whose firmness of purpose is it due that the administration of justice, in this City and County, was saved from grave reproach. That gentleman would not condone the offence, nor suffer its

memory to be outlawed. Straw-bail has done its appointed work. But the vigilance which ensured a merited conviction will see to it that, neither by chicanery, nor evasion, shall justice be ultimately defrauded.

The property of the Society is in excellent condition, having been put and kept in thorough repair. The immediate charge of our several Halls has been under the supervision of Mr. John C. Newton, to whose personal fidelity and industry the Society owes it that its property is maintained in such perfect condition and order. The material improvements in the appearance and convenience of the Stores, upon the main floor, which were suggested in my last Report as probably indispensable, met with the approbation of the TRUSTEES and were finally effected. It is pleasant to reflect that these improvements were made of our own accord, and without a formal application from our tenants. It should be our aim ever to manage our relations of business so that they shall become, neither a source of provocation to our tenants, nor of annoyance to ourselves. Having accommodated our fixed rents to the pressure of times which were at least as onerous to us, as to those whose legal obligations were cheerfully relaxed, we may be pardoned for felicitating ourselves upon the manifest evidence and conviction that this corporation possesses a soul. Our liberality may, or may not, be appreciated ; most likely not,—since gratitude is defined as a lively sense of favors expected. That, however, need not concern us, who have governed our actions by an exact sense of justice.

The *Income* of the Society, during the past official year, as will more fully appear from the detailed account of the Treasurer, has been somewhat reduced. This diminution, however, was largely due to the disuse of the Hall of *Pomona* by the Protestant Episcopal Society of this City, which withdrew its congregation and worship, as soon as possible, from the insidious influence of our heathen devices and emblems . Let us hope that no budding innocent was enticed from grace through the seductive wiles of *Pomona !*

Especial care has been used, by your Committee, to make the modes of egress from our Halls safe beyond a question. To this end the doors were re-hung, so as to open outwards. The descent to the street is by a broad and short flight of stairs ; and of course escape from accident or danger would be easy and swift. These measures of precaution were adopted of our own volition. After they had been some time completed, a notification was received from officers of the Commonwealth, that such provision for the security of the public ought to be made. Should those vigilant guardians of the popular safety contrive, or even attempt, to obviate the perils inseparable from the use and occupation of other Halls with which our own is forced to compete ; whose narrow and successive

flights of stairs would be so quickly choked by smoke and panic-stricken fugitives, our TRUSTEES would not be so selfish as to object.

The Annual Report of the Fruit Committee of the MASSACHUSETTS HORTICULTURAL SOCIETY, for A. D. 1876, (the latest published,) treating of the display of APPLES, contains the following remarks, that should be of interest here :—

"At the Annual Show, there were no prizes offered for collections, as "has been the practice in past years, but all prizes were offered for single "dishes. In making out the Schedule, the Committee selected all the "varieties that were grown to any extent, and offered prizes for thirty-"eight different kinds, proportioning the number of prizes to the value of "the variety for all purposes according to their best judgement,---to the "best and most valuable, four prizes, and to those of the least value, two "prizes. The Committee are aware that this was a great change, but be-"lieve that it was for the best interests of the Society, and also of the "exhibitor, and think that it has given general satisfaction."

Again, under the head of PEARS, the Committee say :—

"PEARS.—The season has been very favorable for this fruit, and the "exhibitions during the season have been superior to the average of the "last few years. The change in the offers of prizes, from collections to "single dishes, as spoken of in apples, has been applied to pears ; and we "think it a great improvement as the dishes of each variety are arranged "together, and if a person comes to get any information in relation to "any particular variety, he can see for himself how it succeeds in Cam-"bridge, Worcester, Concord, Revere, or any other part of the State, and "judge what variety will do best in his location. Another reason for the "change is that it gives the Committee a better opportunity to judge cor-"rectly of the different varieties." * * * * * *

"The display of pears at the Annual Exhibition was not as large as on "some former occasions, but we think that, considering the quality of all "the fruit on exhibition, it was one of the best, if not the best ever made "by this Society. The new rule of offering prizes only for single dishes, "is probably one reason for there being so little inferior fruit.

As this practice was adopted from our Society, we have reason to congratulate ourselves that the Massachusetts Society approve it in actual operation. A very few of our own members were, at one time, inclined to doubt its wisdom, and possibly more than a little inclined to distrust its application. The attempt to draw out collections of Pears, once more, by the offer of premiums at individual expense, was not so signally successful as to encourage repetition. And the fact that the proponents of those premiums, being competitors themselves, reserved their best specimens for entry under the distinct division into varieties, as required by the Society, would appear to indicate that their objections were not very tenaciously cherished. At any rate, the facts are all with the new system. For whereas, in the Centennial year of plenty, thirty-five (35) contributors placed two hundred and fifty (250) plates of Apples upon our tables, in this last year of dearth there were thirty (30) contributors, with

one hundred and five (105) plates. The character of the season, or its being the *odd year*, might materially reduce the crop ; but, even with those drawbacks, there were only five (5) less exhibitors without something to show. In PEARS there was an absolute increase ; there being three hundred and ten (310) single plates in 1877, against two hundred and eighty-four (284) in 1876. Not a striking proof, certainly, of any dissatisfaction with the policy of the Society, on the part of that wide membership whose wishes should ever be consulted ; as they must, when decisively manifested, become a rule.

Should it be your desire to encourage the introduction of novelties—whether of Flower or Fruit, you could happily achieve that aim by the proposal of Prospective Premiums. Such were offered, for many years in succession, during which no claimants presented themselves. But the element of chance enters largely into the production of valuable varieties from the seed ; perhaps too much so, to warrant a hope of such development from our own members, few of whom are so situated as to be able to devote to it the requisite attention and time. Yet we might reap where we have not sown. And a sure return could be anticipated from an offer of prospective premiums, which, not restricted to the production of seedlings, should comprehend the cull and pick of all novelties from bud or scion. This, indeed, would involve little more than another mode of importing scions at the expense of the Society. And it might be difficult to give a good reason why the Society should not even do that !

Our ANNUAL AUTUMNAL EXHIBITION was partially, by no means suitably, appreciated. This should not be construed into a complaint that the pecuniary returns from admission fees, etc., were inadequate, since the TRUSTEES deliberately and wisely established the charge for admission at a merely nominal sum. But to the fact, each year more painfully evident, that the Cattle Show, or Pomological Exhibition, pale in attraction, and that the chief inducement remaining to visit them is simply weariness of all else. A close student of human nature opines that the faith of the American people in the permanence or stability of any thing, was rudely shaken when an armed hand was raised to destroy their political fabric. The facile temperament, so lightly amused, has grown exacting and querulous ; and, if dissatisfied for any considerable time, subsides into chronic discontent and ennui. This may well be a result of lost faith.

In our own case, however, other fault is found, more superficial and of easier remedy, whereof it would be sheer affectation to pretend ignorance, it being a theme of quite general comment. It is claimed, with what justice you must determine, that our whole system of *entry* and *award* is so defective as to work injustice ; and that the receipt of its due by merit is as much a chance of good luck as of careful discrimination. In all this

suspicion—prejudice if you prefer—lurks doubtless much injustice. It is a much mooted question—one that the mere *ipse dixit* of any one by no means settles—whether an entry should be indicated by numbers rather than names. And almost a miracle would be needed to provide you with Committees, whose tireless service and adequate knowledge should be at your beck and call, frequently until midnight, without even the poor retainer of rations, or the prospect of most meagre pay. Nevertheless, dissatisfaction exists ; nourishes itself upon chaff, if you please, yet starves not—and becomes alike contagious and infectious. This dissatisfaction, as your Secretary has been directly informed, withholds many from contributing to our Exhibitions, and threatens to deter more. Shall we dispel such suspicion,—allay this discontent ? And if so, in what most effectual and thorough manner ?

After mature reflection, your Secretary can think of and suggest no other sufficient way than to invite a number of gentlemen from without the County to occupy the position of judges. Doubtless some of the accomplished experts of the MASSACHUSETTS HORTICULTURAL SOCIETY might be induced to assume those functions. Their impartiality could not be challenged, and their competency would be established by the simple fact of their appointment. The expense to this Society should not be considered, in comparison with the general contentment to be produced by such action on the part of your TRUSTEES. A furlough from onerous labor might be grateful to those of your number who have not spared themselves, hitherto, in a thankless service. It might be found, after all, that the accuracy of human judgement is less contingent upon locality than some have imagined in their disappointment—and that fallibility may render imperfect verdicts as well from the banks of the Charles, as from the headwaters of the Blackstone. The wife of Cæsar must not even be suspected. Let it be our ambition and fixed purpose, so to order our policy that each one of our decisions, whether of our Committees or of the whole body of the Society, shall be accepted as just merely because we ordered and approved it. Nor would it be matter for regret if thereby the members of our *Committee of Arrangements* may be left free to attend to their especial duties. Simply to locate from five hundred (500) to a thousand (1,000) distinct plates, or articles, in their proper positions, is a sufficient task for all who are likely to apply themselves, in the hurry and confusion of an Exhibition, to that arduous if indispensable business.

Which is all respectfully submitted, by

EDWARD WINSLOW LINCOLN,
Secretary.

WORCESTER, MASSACHUSETTS,
HORTICULTURAL HALL,
Nov. 7, A. D. 1877.

OFFICERS AND COMMITTEES

OF THE

Worcester County Horticultural Society,

FOR THE YEAR 1878.

PRESIDENT:

WILLIAM T. MERRIFIELD, of Worcester.

VICE PRESIDENTS:

STEPHEN SALISBURY, of Worcester; PHILIP L. MOEN, of Worcester; O. B. HADWEN, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

JOHN CALVIN NEWTON, of Worcester.

TRUSTEES (BY ELECTION):

George W. Richardson,	Worcester	Alexander H. Bullock,	Worcester
Isaac Davis,	"	D. Waldo Lincoln,	"
George E. Francis,	"	Sylvanus Sears,	"
James F. Allen,	"	Henry Phelps,	"
Henry Woodward,	"	Nathaniel Paine,	"
Charles Richardson,	"	Thomas A. Dawson,	"
William T. Harlow,	"	J. Henry Hill,	"
Edwin Conant,	"	James Draper,	"
Samuel A. Knox.	"	Henry L. Parker,	"
Francis H. Dewey,	"	William H. Earle,	"
Stephen Salisbury, Jr.	"	William W. Cook,	"
Samuel Flagg,	"	Calvin L. Hartshorn,	"
Horatio Phelps,	"	Joseph Lovell,	"
Stephen S. Foster,	"	Paul Whitin,	Whitinsville
Thomas M. Lamb,	"	George Cruickshanks,	"
Frank J. Kinney	"	Newell Wood,	Millbury
Alfred Davis,	"	F. M. Marble,	Grafton
Emory Banister,	"	Joseph C. Lovell,	West Boylston
James L. Burbank,	"		

STANDING COMMITTEES.

ON FINANCE:

James Draper, Henry Phelps, Nathaniel Paine.

ON LIBRARY AND PUBLICATION:

Edward W. Lincoln, George E. Francis, William T. Harlow.

ON NOMENCLATURE:

James F. Allen, Henry Phelps, George E. Francis.

ON ARRANGEMENTS AND EXHIBITIONS:

J. C. Newton, *Chairman.* Samuel Flagg, William H. Earle,
George E. Francis, Geo. Cruickshanks, William T. Merrifield, *Pres.*
Henry L. Parker, Henry Phelps, Edward W. Lincoln, *Sec'y,*
Nos. 5 Oak and 18 Front Streets.

☞ THE AUTUMNAL EXHIBITION will open at 6 o'clock P. M., on Wednesday, September 18th, and close on Friday, September 20th, at 8.30 o'clock P. M.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1878.

☞ The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

WORCESTER, MASS.:
PRINTED BY EDWARD R. FISKE, 10 FOSTER STREET.
1878.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

JOHN C. NEWTON, *Chairman.*
GEORGE E. FRANCIS,
SAMUEL FLAGG,
GEORGE CRUICKSHANKS,
HENRY PHELPS,
WILLIAM H. EARLE,
HENRY L. PARKER,

WILLIAM T. MERRIFIELD, *President.*
EDWARD W. LINCOLN, *Secretary,*
Nos. 5 Oak and 18 Front Streets, Worcester.

The Autumnal Exhibition commences on Wednesday, September 18th, at 6 P. M., and closes on Friday, September 20th, at 8.30 P. M.

COMMITTEES OF AWARD.

APPLES.—WILLIAM T. HARLOW, *Chairman;* James F. Allen, Samuel A. Knox, Rufus Woodward and O. B. Hadwen, of *Worcester.*

GRAPES, PEACHES, &c.—WILLIAM H. EARLE, *Chairman;* T. M. Lamb, Charles Goodwin, of *Worcester;* George Cruickshanks, of *Whitinsville;* and F. M. Marble, of *Grafton.*

PEARS.—HENRY L. PARKER, *Chairman;* Henry Phelps, John C. Newton, James Draper, of *Worcester;* and Newell Wood, of *Millbury.*

PLANTS, FLOWERS, &c.—GEORGE E. FRANCIS, *Chairman;* Clarendon Harris, D. S. Messinger, James L. Burbank,* of *Worcester;* and W. W. Cook, of *Paxton.*

VEGETABLES.—ALEXANDER MARSH, *Chairman;* Thomas R. Norcross, J. D. Lovell, Charles Belcher, and William H. Hackett, of *Worcester.*

☞ The Committees will meet at 9 o'clock on the morning of Thursday, September 19th, unless they prefer otherwise, to determine the awards.

☞ The *Chairmen* of Committees are authorized by the *Trustees* to invite the co-operation of any competent person, or persons, in the discharge of their duties.

*Deceased.

GENERAL RULES FOR ALL EXHIBITIONS.

THE SOCIETY will hold its ANNUAL AUTUMNAL EXHIBITION, A. D. 1878, in its own Halls, on Front Street, in the City of Worcester.

The Exhibition will commence on Wednesday, September 18th, at 6 o'clock, P. M., and close on Friday, September 20th, at 8½ o'clock, P. M.

☞ Exhibitors are notified that strict conformity to the Regulations and Rules will be expected and required, for their own benefit as well as for the convenience of the Officers of the Society.

☞ Particular attention is called to the Rules and Regulations on pp. 4–5, and especially to Nos. 1 and 17, respectively ; the one defining the limit of time for entries of Vegetables, and the other requiring lists of all entries to be filed with the Secretary.

RULES AND REGULATIONS.

1. Articles offered for premium at the AUTUMNAL EXHIBITION must be in the Halls and entered with the Secretary before four (4) o'clock P. M., of the opening day of the Exhibition ; *provided*, that all entries of Vegetables for the Exhibition must be made with the Secretary *before* 6 o'clock P. M., on the 14th day of September.

2. Competition for premiums is open to all ; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society ; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester.*

3. After the articles are arranged they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove* them until the Exhibition is closed, when they will be delivered as the contributors may direct.

4. No person shall be entitled to receive more than one premium for the same specimen, and no article for which a premium has been once awarded can receive another during the season.

5. No cards of a business nature will be allowed in any Exhibition.

6. Where a certain number or quantity of Plants, Flowers, Fruits, or Vegetables, is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown ; and in no case can any other varieties than those named in the schedule be substituted.

7. It will be the duty of the Committees to *exclude from exhibition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste.

8. The Committees have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary, by giving seasonable notice thereof.

9. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables under different names; or exhibiting, as grown by himself, Fruit or Vegetables grown by another, thereby violating the objects and rules of the Society; shall be debarred from competing for the Society's premiums until re-instated.

10. No Flowers, Plants, Fruits, or Vegetables, will be entitled to a premium unless they possess points of superiority; and the Committees are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them.

11. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens for trial and examination, if requested.

12. No member of any of the Committees for awarding premiums or gratuities shall, in any case, vote or decide respecting an award for which such member may be a competitor, or therein have an interest; but in such case such member shall temporarily vacate his place upon the Committee, the vacancy for the time being to be supplied by the remaining members of the Committee.

13. All premiums that are not claimed within three months after the Autumnal Exhibition shall be forfeited to the Society.

14. The awards of the premiums will be made known as soon as the premium cards can be filled out and placed upon the tables.

15. Admission to the Autumnal Exhibition, for those who are not members of the Society, 15 cents; children under sixteen years of age, 10 cents; packages of five (5) tickets, 50 cents.

16. All fruits and other articles to be designated at the time of entry, if they are to be reserved; and all fruits and other articles not so reserved at the time of entry, will be sold at auction at the close of the Exhibition, on Friday evening, at 8.30 o'clock, for the benefit of the Society.

17. *Contributors will be required to furnish the Secretary with a list of their articles.*

18. "Downing's Fruits of America," revised edition, will guide the Committees in their decisions upon matters at issue.

☞ SPECIAL NOTICE.—The several Committees will meet at 9 o'clock A. M., Thursday, at latest, to make their awards.

A. D., 1878—MARCH 20.

SPECIAL EXHIBITION OF INDIAN AZALEAS, CHINESE AND OTHER PRIMROSES, CYCLAMENS, HYACINTHS, AND OTHER SPRING-BLOOMING PLANTS.

PLANTS IN BLOOM.—

For the best general display	$ 5 00
For the second best general display	3 00

PRIMROSES.—

For the best six in bloom	3 00
For the second best	2 00
For the best single plant	2 00
For the second best single plant	1 00

CYCLAMENS.—

For the best six in bloom	3 00
For the second best six in bloom	2 00
For the best single plant	2 00
For the second best single plant	1 00

HYACINTHS.—

For the best six in pots	3 00
For the best three in pots	1 00
For the best single specimen	1 00

INDIAN AZALEAS.—

For the best three plants in pots	3 00
For the second best three plants in pots	2 00
For the best single plant in pot	1 00

☞ All articles offered for premium must remain within the Hall during the hours of exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, &c.

SUMMER EXHIBITIONS.

The Opening Exhibition of the Summer Season will be held in the HALL OF FLORA, on Thursday, the 13th day of June, from 3 to 5 o'clock P. M.

SPECIAL NOTICE :

The Rules and Regulations require that correct and legible names shall be attached to each and every plant or flower entered in a class of named varieties ; and that written lists of the same shall be given to the Secretary.

Strict compliance with the Rules and Regulations, to be found on pages 4 and 5, is required on the part of Contributors and Committees.

ON THURSDAY, JUNE 13TH.

HARDY PLANTS AND SHRUBS.

For the best display of cut flowers, varieties with names attached..	$5 00
For the second best.....	3 00
For the third best.....	2 00

VEGETABLES.

ASPARAGUS : —

For the best three bunches, 10 stalks each.....	1 00

ON THURSDAY, P. M., JUNE 20TH.

CUT FLOWERS.

For the best display.....	$ 2 00
For the second best.....	1 00

VEGETABLES.

RHUBARB : —

For the best four stalks.....	$ 1 00

ROSE EXHIBITION.

The Annual Rose Exhibition will be held in the HALL OF FLORA, on Thursday, the 27th day of June, commencing at 3 P. M., and closing at 5 P. M.

All articles for competition must be entered with the Secretary, and be placed on the tables, before 1 o'clock P. M.

GARDEN ROSES.

For the best general display of varieties with names attached	$ 5 00
For the second best	3 00
For the third best	2 00
For the best arranged vase	2 00
For the second best	1 00

CUT FLOWERS.

For the best collection	$ 3 00
For the second best	2 00
For the third best	1 00

TO FLORISTS.

On Thursday, July 4th, and on each successive Thursday, viz. :

July 11th,	August 8th,	September 5th,
July 18th,	August 15th,	September 12th,
July 25th,	August 22d,	
August 1st,	August 29th,	

Premiums of three dollars ($3.00), two dollars ($2.00), and one dollar ($1.00), severally, will be offered for the first, second and third best SINGLE STAND, Basket, or Dish, of CUT FLOWERS. The first Exhibition to commence with the STANDS ; to be followed at the next with Baskets, or Dishes, and thus alternating throughout the season.

☞ The TRUSTEES are also authorized to offer a premium of one dollar ($1.00) for the best display, in their season, of each of the following :

IRIS,	AZALEAS, (hardy)	LILIES, (summer)
PÆONIES—Herbaceous,		PÆONIES—Tree,
HOLLYHOCKS,		PHLOX—Late,

should such displays be deemed worthy of an award.

PREMIUMS FOR FRUITS DURING THE SEASON.

☞ The Season is understood to extend from the opening in June to the Autumnal Exhibition in September, during which there will be an Exhibition every Thursday, and premiums will be awarded as enumerated in the Schedule.

RULE.—No person can compete at an Exhibition for more than one premium, with the same species of berry, or variety of fruit.

All *Small Fruits* must be entered in quart boxes or baskets; but may be displayed subsequently in plates or dishes, at the taste of the Exhibitor.

THURSDAY, JUNE 27TH.

STRAWBERRIES.

☞ Entries must be made with the Secretary, and the articles be upon the tables before 1 o'clock P. M.

PREMIUMS.

For the best quart of Charles Downing	$ 2 00
For the second best quart of Charles Downing	1 00
For the third best quart of Charles Downing	50
For the best quart of Col. Cheney	1 00
For the best quart of Monarch of the West	2 00
For the second best quart of Monarch of the West	1 00
For the best quart of Jucunda	2 00
For the second best quart of Jucunda	1 00
For the third best quart of Jucunda	50
For the best quart of Triomphe de Gand	1 00
For the second best quart of Triomphe de Gand	50
For the best quart of Wilson	2 00
For the second best quart of Wilson	1 00
For the third best quart of Wilson	50

For the best quart of any other variety..... 1 00
For the best two quarts in the Exhibition..... 2 00

The sum of $6.00, placed in the hands of the Committee, may be awarded for varieties not in the Schedule.

VEGETABLES.

PEAS : —
For the best peck.....$ 1 00

SPECIAL NOTICE!

In order to afford the Committees an opportunity to examine and report on the articles exhibited, no other person can be admitted to, or remain in the Hall, between the hours of one (1) and three (3) o'clock on the day of the Exhibition.

On THURSDAY, JULY 4th.

CHERRIES.

For the best two quarts of Black Tartarian.....$ 2 00
For the second best two quarts of Black Tartarian 1 00
For the best two quarts of any other named Black variety..... 1 00
For the best two quarts of any named White variety..... 2 00
For the second best two quarts of any named White variety... 1 00
For the best two quarts of any named Red variety..... .. 2 00
For the second best two quarts of any named Red variety..... 1 00

On THURSDAY, JULY 11th.

CURRANTS.

For the best two quarts of La Versaillaise.....$ 2 00
For the best one quart of La Versaillaise..... 1 00
For the best quart of Red Dutch..... 1 00
For the second best quart of Red Dutch..... 50
For the best quart of Dana's Transparent..... 1 00
For the best quart of White Gondouin..... 1 00
For the best two quarts of White Grape..... ..... 2 00
For the best one quart of White Grape..... 1 00
For the best one quart of any other variety..... 1 00

On THURSDAY, JULY 18th.

RASPBERRIES.

For the best two quarts each of three named varieties	$ 3 00
For the best two quarts of Brinckle's Orange	2 00
For the second best two quarts of Brinckle's Orange	1 00
For the best two quarts of Northumberland	2 00
For the second best two quarts of Northumberland	1 00
For the best two quarts of Hudson River Antwerp	2 00
For the second best two quarts of Hudson River Antwerp	1 00
For the best quart of Clarke	1 00
For the best quart of Franconia	1 00
For the best quart of Hornet	1 00
For the best quart of Knevett's Giant	1 00
For the best quart of Philadelphia	1 00

BLACK CAPS.

For the best quart of Davison's Thornless	$ 1 00
For the second best quart of Davison's Thornless	50
For the best quart of Doolittle	1 00
For the second best quart of Doolittle	50
For the best quart of Mammoth Cluster	1 00
For the second best quart of Mammoth Cluster	50

On THURSDAY, JULY 25th.

RASPBERRIES.

For the best two quarts of any named variety	$ 2 00
For the second best	1 00

BLACKBERRIES.

For the best quart of Kittatinny	$ 1 00
For the second best quart of Kittatinny	50
For the best quart of Wachusett	1 00
For the second best quart of Wachusett	50

On THURSDAY, AUGUST 1st.

PEARS.

For the best ten specimens of Doyenné d 'Eté	$ 1 00
For the best ten of any other variety	1 00

POTATOES.

For the best peck (new) 1 00

TOMATOES.

For the best twelve specimens of a named variety (open culture).. 2 00
For the second best (open culture) 1 00

On THURSDAY, AUGUST 8th.

APPLES.

For the best ten specimens of any named variety ..... $ 2 00
For the second best ten specimens of any named variety 1 00

PEARS.

For the best ten specimens of Beurre Giffard ..... $ 2 00
For the second best 1 00
For the best ten of any other named variety 1 00

On THURSDAY, AUGUST 15th.

APPLES.

For the best ten specimens of Early Sweet Bough ..... $ 1 00
For the best ten specimens of Williams' Early Red 1 00
For the best ten specimens of Red Astrachan 2 00
For the second best ten specimens of Red Astrachan 1 00

PEARS.

For the best ten Rostiezer ..... $ 1 00
For the best ten of any other named variety 1 00

On THURSDAY, AUGUST 22d.

APPLES.

For the best ten specimens of any named variety ..... $ 1 00
For the best ten of any other named variety 1 00

PEARS.

For the best ten specimens of any named variety 1 00
For the best ten of any other named variety 1 00

On THURSDAY, AUGUST 29th.

APPLES.

For the best ten specimens of any named variety.....$ 1 00
For the best ten specimens of any other named variety..... 1 00

PEARS.

For the best ten specimens of Clapp's Favorite.....$ 1 00
For the best ten specimens of any other named variety..... 1 00

PEACHES.

For the best ten specimens of Crawford's Early.....$ 2 00

VEGETABLES.

For the best twelve Tomatoes.....$ 2 00
For the second best..... 1 00

On THURSDAY, SEPTEMBER 5th.

APPLES.

For the best ten specimens of any named variety.....$ 2 00
For the best ten specimens of any other named variety 1 00

PEARS.

For the best ten specimens of Clapp's Favorite.....$ 2 00
For the second best..... 1 00
For the best ten specimens of Bartlett..... 2 00
For the second best..... 1 00
For the best ten specimens of Dearborn's Seedling..... 1 00

PEACHES.

For the best dish of ten specimens.....$ 2 00
For the second best..... 1 00

On THURSDAY, SEPTEMBER 12th.

APPLES.

For the best ten specimens of Red Astrachan.....$ 1 00
For the best ten specimens of Early Williams..... 1 00
For the best ten specimens of Early Sweet Bough..... 1 00
For the best ten specimens of Duchess of Oldenburg..... 1 00

PEARS.

For the best ten specimens of Beurre de 'l Assomption.....$ 1 00
For the best ten specimens of Flemish Beauty..... ..... 1 00
For the best ten specimens of Belle Lucrative..... 1 00

PEACHES.

For the best ten specimens of a named variety.....$ 2 00
For the second best ten specimens..... 1 00

PLUMS.

For the best ten specimens of any named variety.....$ 1 00

VEGETABLES.

For the best twelve Tomatoes.....$ 2 00
For the second best twelve Tomatoes..... 1 00

At these Summer Exhibitions the Standing Committee on Flowers, Plants, &c., &c., will serve.

The Committee on Fruits, &c , &c., will consist of Messrs. Henry Phelps, James Draper, John C. Newton, George Cruickshanks, of *Whitinsville*, and the Secretary.

PREMIUMS.

AUTUMNAL EXHIBITION.

APPLES.

COMMITTEE.—Wm. T. Harlow, *Chairman;* James F. Allen, Rufus Woodward, Samuel A. Knox, and O. B. Hadwen, of *Worcester.*

☞ The Committee will meet at 9 o'clock, on Thursday morning, September 19th, at latest, to determine the awards.

For the best ten Astrachan (Red)	$ 2 00
For the second best	1 50
For the third best	1 00
For the best ten Baldwin	2 00
For the second best	1 50
For the third best	1 00
For the best ten Cogswell	2 00
For the second best	1 50
For the third best	1 00
For the best ten Duchess of Oldenburg	2 00
For the second best	1 50
For the third best	1 00
For the best Foundling	2 00
For the second best	1 00
For the best ten Golden Sweet	2 00
For the second best	1 50
For the third best	1 00

For the best ten Gravenstein	2 00
For the second best	1 50
For the third best	1 00
For the best ten Holden Pippin	2 00
For the second best	1 50
For the third best	1 00
For the best ten Hubbardston Nonesuch	2 00
For the second best	1 50
For the third best	1 00
For the best ten Leicester Sweet	2 00
For the second best	1 50
For the third best	1 00
For the best ten Lyscom	2 00
For the second best	1 50
For the third best	1 00
For the best ten Maiden's Blush	2 00
For the second best	1 50
For the third best	1 00
For the best ten McClellan	2 00
For the second best	1 00
For the best ten Mother	2 00
For the second best	1 50
For the third best	1 00
For the best ten Northern Spy	2 00
For the second best	1 50
For the third best	1 00
For the best ten Peck's Pleasant	2 00
For the second best	1 50
For the third best	1 00
For the best ten Porter	2 00
For the second best	1 50
For the third best	1 00
For the best ten Rhode Island Greening	2 00
For the second best	1 50
For the third best	1 00
For the best ten Roxbury Russet	2 00
For the second best	1 50
For the third best	1 00
For the best ten Sweet Bough (Early)	2 00
For the second best	1 50
For the third best	1 00

For the best ten Sutton Beauty	2 00
For the second best	1 00
For the best ten Tallman's Sweet	2 00
For the second best	1 50
For the third best	1 00
For the best ten Twenty Ounce	2 00
For the second best	1 50
For the third best	1 00
For the best ten Washington Royal	2 00
For the second best	1 50
For the third best	1 00
For the best ten Washington Strawberry	2 00
For the second best	1 50
For the third best	1 00
For the best ten Williams' Early Red	2 00
For the second best	1 50
For the third best	1 00

The sum of $10.00 is placed at the disposal of the Committee for Gratuities for varieties not named in the list, under the same restrictions as limit Gratuities for Pears.

CRAB APPLES.

For the best display	$ 3 00
For the second best	2 00
For the best dish of twenty-four specimens of any named variety	2 00
For the second best	1 00
For the best 24 Hyslop	2 00
For the best 24 Transcendent	2 00

GRAPES, PEACHES, &c.

COMMITTEE.—William H. Earle, *Chairman;* Thomas M. Lamb, Chas. Goodwin, of *Worcester;* George Cruickshanks, of *Whitinsville;* and F. M. Marble, of *Grafton.*

☞ The Committee will meet at 9 o'clock on Thursday morning, September 19th, at latest, to determine the awards.

GRAPES.

For the best six named varieties grown under glass, two clusters of each variety	$10 00
For the second best	7 00
For the third best	5 00
OPEN AIR.—For the best four clusters of Concord	2 00
For the best four clusters of Delaware	2 00
For the best four clusters of Diana	2 00
For the best four clusters of Hartford Prolific	1 00
For the best four clusters of Iona	2 00
For the best four clusters of Rogers No. 3, (Massasoit)	2 00
For the best four clusters of Rogers No. 4, (Wilder)	2 00
For the best four clusters of Rogers No. 9, (Lindley)	2 00
For the best four clusters of Rogers No. 15, (Agawam)	2 00
For the best four clusters of Rogers No. 19, (Merrimac)	2 00
For the best four clusters of Salem	2 00
For the best four clusters of Worden	2 00
For the best four clusters of Martha	2 00
For the best four clusters of any other named variety	2 00
For the best second four clusters of any other named variety	1 00

PEACHES.

For the best ten Crawford, (Early)	$ 2 00
For the second best	1 00
For the best ten Crawford, (Late)	2 00
For the second best	1 00
For the best ten Cooledge	2 00
For the second best	1 00
For the best ten Oldmixon	2 00
For the second best	1 00
For the best ten Stump the World	2 00
For the second best	1 00
For the best ten Red Rareripe	2 00
For the second best	1 00
For the best ten President	2 00
For the second best	1 00

PLUMS.

For the best ten specimens of Imperial Gage.....$ 1 00
For the best ten specimens of Lombard..... 1 00
For the best ten specimens of Washington..... 1 00
For the best ten specimens of Jefferson..... 1 00

QUINCES.

For the best ten Orange Quinces.....$ 3 00
For the second best..... 2 00
For the best ten Quinces of any other kind..... 2 00

A sum not exceeding $6.00 is placed at the disposal of the Committee for Gratuities for varieties not named in the list, with the same restrictions as on Pears.

PEARS.

COMMITTEE.—Henry L. Parker, *Chairman;* Henry Phelps, John C. Newton, James Draper, of *Worcester;* and Newell Wood, of *Millbury.*

☞ The Committee will meet at 9 o'clock on Thursday morning, September 19th, at latest, to determine the awards.

CLASS I.—

For the best ten Bartlett.....$ 3 00
For the second best..... 2 00
For the third best..... 1 00
For the best ten Belle Lucrative..... 2 00
For the second best..... 1 00
For the best ten Beurre Bosc..... 3 00
For the second best..... 2 00
For the third best..... 1 00
For the best ten Beurre Clairgeau..... 2 00
For the second best..... 1 00
For the best ten Beurre d' Anjou..... 3 00
For the second best..... 2 00
For the third best..... 1 00
For the best ten Beurre Diel..... 2 00
For the second best..... 1 00

For the best ten Beurre Hardy	2 00
For the second best	1 00
For the best ten Beurre Langelier	2 00
For the second best	1 00
For the best ten Beurre Superfin	3 00
For the second best	2 00
For the third best	1 00
For the best ten Dix	1 00
For the best ten Doyenné Boussoc	2 00
For the second best	1 00
For the best ten Doyenné du Comice	3 00
For the second best	2 00
For the third best	1 00
For the best ten Duchesse d'Angoulême	3 00
For the second best	2 00
For the third best	1 00
For the best ten Durandeau	2 00
For the second best	1 00
For the best ten Flemish Beauty	2 00
For the second best	1 00
For the best ten Goodale	2 00
For the second best	1 00
For the best ten Glou Morceau	2 00
For the second best	1 00
For the best ten Howell	2 00
For the second best	1 00
For the best ten Josephine de Malines	2 00
For the best ten Lawrence	3 00
For the second best	2 00
For the third best	1 00
For the best ten Louise Bonne de Jersey	3 00
For the second best	2 00
For the third best	1 00
For the best ten Mt. Vernon	2 00
For the second best	1 00
For the best ten Marie Louise	2 00
For the second best	1 00
For the best ten Onondaga	2 00
For the second best	1 00
For the best ten Paradis d'Automne	2 00
For the second best	1 00

For the best ten Seckel	3 00
For the second best	2 00
For the third best	1 00
For the best ten Sheldon	3 00
For the second best	2 00
For the third best	1 00
For the best ten St. Ghislain	2 00
For the second best	1 00
For the best ten St. Michel	2 00
For the second best	1 00
For the best ten St. Michel Archange	2 00
For the second best	1 00
For the best ten Urbaniste	2 00
For the second best	1 00
For the best ten Vicar of Winkfield	2 00
For the second best	1 00
For the best ten Washington	2 00
For the second best	1 00
For the best ten Winter Nelis	3 00
For the second best	2 00
For the third best	1 00

CLASS 2. (New Pears.)

For the best ten Beurre de Assomption	1 00
For the best ten Souvenir du Congrés	1 00
For the best ten Duchesse de Bordeaux	1 00
For the best ten Dr. Reeder	1 00
For the best ten Helene Grégoire	1 00
For the best ten Huyshe's Prince Consort	1 00
For the best ten Rutter	1 00
For the best ten Emile d' Heyst	1 00
For the best ten Doyenné Hovey	1 00
For the best ten Souvenir d' Esperen	1 00
For the best ten Gen. Todleben	1 00
For the best ten Duc de Bordeaux	1 00
For the best ten Beurre Delaunoy	1 00

The sum of $10.00 is placed at the disposal of the Committee to be used in Gratuities for varieties not mentioned in the above list, if, in their judgment, the varieties are entitled to it; but in no case shall a gratuity be given to a variety named in the list, which was entered for premium and failed to get an award.

SPECIAL PREMIUM.

Mr. George Cruickshanks offers, by sanction of the TRUSTEES, the following *special* premiums:

For the best arranged dish of Fruits, (without restrictions as to varieties) ..... $ 3 00
For the second best 2 00

The dishes to be substantially 20x24 inches in dimensions.

PLANTS, FLOWERS, &c.

COMMITTEE.—George E. Francis, *Chairman;* Clarendon Harris, David S. Messinger, and James L. Burbank, of *Worcester;* and W. W. Cook, of *Paxton.*

☞ The Committee will meet at 7 o'clock on the evening of Wednesday, September 18th, being the opening evening of the Exhibition, to determine the awards.

[RULE: All Pot-Plants shall have been grown in the Pots in which they are exhibited.]

ASTERS—

For the best display (one stand) ..... $ 4 00
For the second best 3 00
For the third best 2 00
For the fourth best 1 00

BASKET.—(HANGING)—

For the best, grown at least one month in the basket 3 00
For the second best 2 00
For the third best 1 00

BOUQUETS.—(HAND)—

For the best pair 3 00
For the second best 2 00

BOUQUETS.—(PARLOR)—

For the best pair 3 00
For the second best 2 00

DAHLIAS.—

For the best twelve named varieties 2 00

DESIGN.—(FLORAL)—

For the best	4 00
For the second best	2 00

FLOWERS.—(CUT)—[Variety and arrangement will be considered as well as rarity and quantity.]

For the best Collection, and best kept during the Exhibition, of two stands	6 00
For the second best	4 00
For the third best	2 00
For the best Stand	3 00
For the second best	2 00
For the third best	1 00
For the best arranged Basket or Dish	3 00
For the second best	2 00
For the third best	1 00

GLADIOLUS.—

For the best Collection, named or unnamed varieties	5 00
For the second best	3 00
For the best ten named varieties	3 00
For the second best	2 00
For the best specimen spike	1 00
For the best seedling	1 00

PANSIES.—

For the best display	3 00
For the second best	2 00
For the third best	1 00

PINKS.—(CHINA)—

For the best display	2 00
For the second best	1 00

PETUNIAS.—

For the best display	2 00
For the second best	1 00

VERBENAS.—

For the best display	3 00
For the second best	2 00
For the third best	1 00
For the best display of seedlings	2 00

STOVE AND GREENHOUSE PLANTS.

PLANTS WITH ORNAMENTAL FOLIAGE.—

For the best twelve	$15 00
For the second best	8 00
For the best six	5 00
For the second best	3 00
For the best single	3 00
For the second best	1 00

PLANTS IN BLOOM.—

For the best four	5 00
For the second best	3 00
For the best single	3 00
For the second best	1 00

RARE AND NEW PLANTS.—

For the best Collection	6 00
For the second best	4 00

FERNS AND LYCOPODS.—

For the best Collection	6 00
For the second best	4 00

PARLOR PLANTS IN POTS.—(From Amateurs.)—

For the best collection, not exceeding twelve varieties	5 00
For the second best	3 00
For the best single Plant	2 00
For the second best	1 00

FERNERY OR WARDIAN CASE, from any source.—

For the best	3 00
For the second best	1 00

VEGETABLES.

COMMITTEE.—Alexander Marsh, *Chairman;* Thomas R. Norcross, J. D. Lovell, Charles Belcher, and William H. Hackett, of *Worcester.*

☞ All entries in this Department must be made with the Secretary before 6 o'clock P. M., on the 14th day of September. And all Vegetables exhibited for premium must be in the Hall of CERES by 4 o'clock P. M., on Wednesday, the 18th day of September.

☞ The Committee will meet at 9 o'clock on Thursday morning, September 19th, or sooner, if they choose, to determine the awards.

BEANS.—

For the best four named varieties	$ 1 00

BEETS.—

For the best six Egyptian	1 00
For the best six Sugar	1 00
For the best six Turnip	1 00

CABBAGES.—

For the best two Large Flat Brunswick	2 00
For the best single specimen	1 00
For the best two Drumhead	2 00
For the second best	1 00
For the best two Drumhead Savoy	2 00
For the best single specimen	1 00
For the best two early Sweinfurth	1 00
For the best two Red	2 00
For the best single specimen	1 00
For the best two Savoy	2 00
For the best single specimen	1 00

CARROTS.—

For the best six Early Horn or Short Scarlet	1 00
For the best six Long Orange	1 00
For the best six Intermediate	1 00

CAULIFLOWERS.—

For the best three specimens 2 00
For the best single specimen 1 00

CELERY.—

For the best six roots, (blanched) 3 00
For the second best " 2 00

CORN.—

For the best Darling's Early Sweet six ears 2 00
For the second best " 1 00
For the best Stowell's Evergreen " 2 00
For the second best " 1 00
For the best Early Minnesota " 2 00
For the second best " 1 00
For the best Moore's Early Concord " 2 00
For the second best " 1 00
For the best of any other named variety " 2 00
For the second best " 1 00

CRANBERRIES.—

For the best peck 1 00

CUCUMBERS.—

For the best half peck for pickling 2 00

EGG PLANT.—

For the best three specimens 1 00

HORSE RADISH.—

For the best six roots 1 00

MELONS.—

For the best two Water 2 00
For the second best 1 00
For the best Green Flesh, three specimens 2 00
For the best Yellow Flesh, three specimens 2 00

ONIONS.—

For the best half peck of Red 1 00
For the best half peck of Silver Skin 1 00
For the best half peck of Yellow Danvers 1 00
For the best half peck of any other named variety 1 00

PARSNEPS.—

For the best six Guernsey 1 00
For the best six Hollow Crown 1 00

POTATOES.—

For the best half peck Early Rose	2 00
For the second best	1 00
For the best half peck Snowflake	2 00
For the second best	1 00
For the best half peck Durgin's Seedling	2 00
For the second best	1 00
For the best half peck Extra Early Vt	2 00
For the second best	1 00
For the best half peck of any other named variety	2 00

PUMPKINS.—

For the best three	2 00
For the second best	1 00

PEPPERS.—

For the best half peck	1 00

SALSIFY.—

For the best six specimens	1 00

SQUASHES.—

For the best three pure Crookneck	1 00
For the best three pure Canada Crookneck	1 00
For the best three pure Hubbard	2 00
For the best three pure Marblehead	2 00
For the best three pure Marrow	2 00
For the best three pure Turban	2 00
For the best three pure Butman	2 00
For the best three pure Yokohama	1 00

TOMATOES.—

For the best Canada Victor	1 00
For the best Boston Market	1 00
For the best twelve Tilden	1 00
For the best twelve of any other named variety	1 00

TURNIPS.—

For the best six English or Flat, white or yellow	1 00
For the best six White Swedes	1 00
For the best twelve Yellow Swedes	1 00

TRANSACTIONS

OF THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1878;

COMPRISING

A CONSIDERATION OF

TILLAGE, INTRODUCED BY VICE-PRES. HADWEN, PAGE 5

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ORCHARD FRUITS, THEIR CULTIVATION, STORING AND KEEPING, INTRODUCED BY JOSEPH C. LOVELL, " 16

INSECTS AND OTHER ENEMIES OF FRUITS AND FLOWERS, INTRODUCED BY F. J. KINNEY, " 21

THE TWELVE BEST ANNUAL AND PERRENNIAL FLOWERING PLANTS, INTRODUCED BY MRS. THOMAS L. NELSON, " 26

ALSO,

THE ANNUAL REPORTS OF THE SECRETARY AND OF THE LIBRARIAN.

WORCESTER:
PRINTED BY EDWARD R. FISKE.
1879.

NOTE.

Acknowledgements are due to the *Spy*, and the *Evening Gazette*, (emphatically the latter), for their full and precise Reports of the Weekly Meetings and Discussions, without whose essential aid the summary herein published would have been impossible. The Committee especially aimed to cover topics that were not embraced in former "Transactions."

E. W. L.

HORTICULTURAL HALL,
January 14, A. D. 1879.

TILLAGE.

Considered by the Society, January 17th, A. D. 1878.

The subject was to have been introduced by Calvin S. Hartshorn, Esq., but he was unavoidably absent. Vice-President Hadwen was therefore called upon to fill the gap, and responded with his usual good will. He said the foundation of tillage is ploughing, and the question of deep or shallow ploughing first presents itself, but here fixed principles cannot be laid down. On strong soils and with abundant manure, deep ploughing is desirable. He had ploughed his farm all over, running a second plough in the furrow of the first, and the results were various. It is well to plough a sod under deep, but he would plough manure in lightly ; for roots he would plough manure in deep and then plough again to mingle the manure with the soil. Thorough ploughing is more important than deep ploughing. A good seed-bed is the end sought, and after ploughing there must be other manipulation. For corn he would plough in the fall, and spread the manure on the top in the winter, harrow it thoroughly in the spring, and put in the seed. His experience was less favorable with ploughing manure under and then putting more in the hill.

Mr. Sylvanus Sears differed in regard to the spreading of manure in the winter. He had spread in the spring and harrowed for corn, but with poor results. He favored ploughing manure under, rather lightly ; he cited bad results from ploughing manure in too deeply, and said it was admissible only when the soil was deep and manure plenty. He praised the Centennial plough of the Ames Plow Company, and said its leaving the field flat instead of in lands is a great improvement. Farmers often are mistaken in regard to their depth of furrow, getting only five inches when they think they see seven. Various soils require differing ploughs, —a sandy soil breaking from the mould board almost without effort, while stiff soil requires a special plough to properly pulverize the land. For old land adapted to horticulture he would plough a narrow furrow and be sure and not cover anything up. Cross ploughing is here very desirable. He condemned the old-time harrow, which drags down the soil and makes it compact ; he contrasted this with the Fish and the Share's harrow, which lift up the soil and leave it light; for deep work he favored the Fish har-

row. A roller to mash the clods is often desirable after the soil has been well stirred. He would stir the soil all he could afford, and quoted an old writer to the effect that soil might be so thoroughly stirred as to almost remove the necessity for manures. .He would have earth frequently stirred during the growth of a crop when possible, to prevent packing and crust by sun and rain.

Mr. James Draper favored deep tillage, and related his experience with sub-soiling ; he first ploughed seven or eight inches, then cross-ploughed the same depth, and then followed in the same furrow with a sub-soil plough, stirring the soil, but not lifting it ; the soil was opened nearly twenty inches, a heavy soil with hard clay subsoil ; he applied forty-five cords of manure to the acre, and had wonderful results, with strawberries for two years, and subsequently with trees. It was eight years ago, but the result is still manifest.

Mr. F. J. Kinney was called out by a remark that he didn't plough at all ; he said he did not use a plough because he was on a rock where he couldn't plough ; he had seen good fields ruined by deep ploughing,—one a stiff clay soil, twelve inches deep, with four oxen, and since it had not produced enough to feed those four oxen ; it is cold and sour, and will neither grow corn nor grass. He thought much is lost by too deep ploughing ; the work should be on surface in pulverization ; a good seed-bed is the desideratum. The best carrots he ever saw were grown on a hard gravel sub-soil ploughed only four inches deep, and the crop had to be dug with a crow-bar ; he had noticed that the best plants are often found in a hard path which has been trodden for years ; his strawberry crops have stood the drought best when the soil had been stirred only three or four inches ; the sun and hot air penetrate just as far as the soil is stirred ; below there is a retention of moisture.

Mr. Wm. H. Earle said it is an important question whether the soil should be stirred deeply or not ; if the last speaker is correct, almost all agricultural experimenters are at fault. He favored frequent stirring of the soil during the growing crop. Another point is that over forty per cent. of a crop comes from above the ground rather than from the ground, but some of this finds its way to the plant through the loosened earth and the roots.

Mr. Ephraim Chamberlain said various soils need differing methods ; as a rule a man who has a mellow soil will go deep, but with a rocky soil he will plough shallow ; his best experience was with heavy manuring and shallow but very thorough pulverizing ; he had harvested fine crops, just in proportion as he had attended to pulverization.

Mr. Earle said his strawberry fields were ploughed very deeply, and he got last year $1500 worth of fruit on three acres. He would not spread manure on soil until after it had been thoroughly ploughed.

Mr. Joseph Lovell said Mr. Earle's land has been ploughed very deep for eighteen years ; he had put eighty cords of manure on three acres, and then used phosphate in the hill, on this soil, before Mr. Earle had it.

Mr. Chamberlain said with fifteen cords of manure to the acre he expected to get double crops for three or four years. He related instances of heavy manuring and deep ploughing, where the deep ploughing had ruined the field.

Mr. Sears cited instances of deep ploughing, one where four inches of gravel was brought to the surface, and although there was plenty of manure the crop didn't come ; the fault was that the soil wasn't fit to plough deep. In another case, a deep alluvial soil, deep ploughing proved very satisfactory ; it requires discrimination ; a meadow requires different treatment from a shallow soil on a side-hill. In one case he had had good success with ploughing on a stony soil from three to five inches deep, and the land was in good heart fifteen years afterward.

Mr. F. M. Marble said the question of deep tillage depends on the soil; with a rich subsoil the plough should go deeper every year, but as it is brought to the surface, it should be thoroughly incorporated with the top soil, and the whole well manured ; it requires time and manure to utilize deep tillage; plant roots will go as deep as the soil is fitted for them.

Mr. Hadwen said the question of deep or shallow ploughing cannot be decided by rule; the nature of the soil must govern that. He then suggested the application of manures as a part of tillage, and recited various experiments in this department, tending to the idea that the best results came from incorporating the manure through the four or five inches at the top of the soil.

Mr. Kinney detailed the growth of strawberry plants on hard walks of coal ashes.

Mr. Newell Wood of Millbury asked if good results from shallow tillage on an old pasture were not owing to the fact that it had been fallow a long time. Mr. Sears, who had cited the instance, said this might be partially so, but he was sure that the crop was not all owing to that cause. He favored a rotation of crops, and said perhaps the ash-walk of Mr. Kinney had been disintegrated by long exposure, and contained nourishment for the plant.

Mr. Thomas Harlow of West Boylston asked for details of Mr. Chamberlain's cultivation, who replied that after ploughing shallow he manured ; then he harrowed twice, and then used a white birch bush just as long as he has time, and then he bushes the field again just before the corn comes up. After the corn is up he puts the cultivator between the rows, both ways ; he relied on the bush as the very best pulverizer.

Mr. Sears said he did not believe in the bush ; it does not go deep enough ; he prefers twice harrowing with a Fish harrow, and then uses a roller.

Mr. Chamberlain said a rolled surface will evaporate moisture more quickly than a loose, rough one, but a bush compacts the soil about the seed while it leaves the surface rough.

Mr. Sears said just for that reason he didn't want a bush ; he wanted a smooth surface over a loose soil, and the roller gives it perfectly.

Mr. Chamberlain related his experience where he had carted a large quantity of manure over a field of corn after it was planted, and the cart track grew the best corn.

Mr. Hadwen introduced a description of an implement suggested by Mr. Ware of Marblehead,—a stone boat with slats on its under surface, which gather the clods and crushes them much better than either roller or bush, especially for finishing after seeding ground.

Mr. Sears said the implement will work well where there are no stones, but it is not adapted to this locality ; it pushes the stones along, leaves furrows and does not leave smooth work.

Mr. Merrifield, president, said he had used the implement ; it works well except where there are large stones ; the smaller stones are crushed into the soil ; he put the slats on at an angle, securing a drawing stroke on the soil, securing it easier working ; he considered it worth more than a roller. He also spoke of another implement he had made to crush manure on grass land ; it is of oak plank, five feet square, and filled with short pins of one inch iron, projecting about an inch ; it works admirably, breaking all the lumps and leaving the sod in good condition. He said every farmer must decide on deep or shallow ploughing only on the merits of each field by itself ; he spoke of Prof. Mape's ideas of subsoiling, which he had put in practice, using a share which lifted and broke the earth below the first ploughing of eleven inches deep ; ground ploughed thus twenty-five years ago and not ploughed since produces two and a half tons of grass to the acre ; he had spaded a small section of the field twelve years after, and found first about ten inches of light soil, then a shell of soil which required picking, and under that a foot of light soil ; trees and grass grew wonderfully well there ; the deep soil absorbs moisture best, and hard ground freezes most quickly. He did not approve deep soil for grapes, for the roots need the sun ; if the fertilizers are put near the top of the soil the roots will stay there. In regard to applying manure, he believed in ploughing and then applying the manure near the surface ; he would break up a field in the spring, turn the sod well under, spread on the manure, and then pulverize it ready for the crop.

Mr. Joseph Lovell advocated ploughing the manure in deep, and then putting something in the hill to give the plant a start, leaving it to find the deeper manure when it was needed later in the season. He quoted the practice on the sea-coast of trenching soil three feet deep and putting sea weed and manure at the bottom.

Mr. Draper said he would advocate deep stirring of the soil, but not the bringing up to the surface of the lower strata ; he had also trenched land two feet deep, stirring the soil and taking out the stone, but not turning it bottom side up.

Mr. Hadwen then suggested the proper time to apply manure ; he said manure evaporates but little ; the best farmers put out the manure when most convenient and plough it in when they get ready ; this is a revolution from the old system ; he said the gases which escape from manure heaps in the open field are not fertilizers, at least they are not ammonia ; their value is not worth considering ; this is Dr. Goesmann's observation ; Mr. Hadwen said it is doubtful if keeping manure in a cellar is as valuable as spreading it immediately on the soil; he was closely questioned by Messrs. Marble and Earle, and expressed the opinion that there was nothing like fresh manure for the soil ; he related his own experience in effect that compost, or well rotted manure, is less valuable than fresh manure upon the soil ; he would at this season draw the manure and spread it on the surface.

Mr. Sears said he would partly accept Mr. Hadwen's theory ; he had tried the experiment and in the same field, the same season, with part ploughed in the fall and part left on the surface until spring, and a third part spread from the barn cellar in the spring, and the latter gave the best crop.

Mr. Hadwen replied with his experience ; he ploughed in September and began putting on manure on the surface, keeping it up until snow was deep, compelling the delay till spring of finishing the work ; the manure was spread evenly, but the best crop was where the manure was put on the field in the fall and winter.

Mr. Kinney asked if hen manure and hog manure are to be treated as has been recommended for cow manure ; he thought any manure should be put where all its good can be saved ; he thought hen manure and hog manure would waste in exposure in an open field.

Mr. Hadwen said manure will not thaw so soon as the earth, and when it does thaw and liberate its elements the earth is ready to receive them ; this explains why the mannre spread in the winter does not waste.

Mr. Chamberlain said a bare piece of ground forbidden to grow a crop, will be impoverished sooner than by an exhaustive crop ; he wanted to know where the elements go to ; his theory was to extract the fertility of the soil the quickest possible way, to arrest and make use of the escaping elements.

Mr. Earle believed manure lost a dollar a cord if left uncovered. Mr. Chamberlain thought winter-exposed manure would start a crop better, but it would waste in summer. Mr. Dawson would use green manure for strawberries and old manure for corn.

Mr. A. B. Lovell was not in favor of exposing manure, and referred to weighing a cord and three inches of solid and liquid manure which weighed 9800 pounds.

This closed the discussion, and it was announced that Mr. Sylvanus Sears would read a paper on vegetables, as the basis of next week's discussion.

GARDEN VEGETABLES.

Considered by the Society, January 24th, A. D. 1878.

The subject was introduced by Mr. Sylvanus Sears, whose essay, with the following discussion, are thus carefully condensed.

SYLVANUS SEARS.

He alluded to the intelligence, skill and experience requisite to the successful culture of Vegetables as important, and their absence he thought explained many failures. The question of manures and their application, the selection of seeds, and the process of cultivation, all are essential, and no rule governing these can be given, for soils vary, different plants need varying manures and varying cultivation, and what will yield good results in one place will be a disappointment in another.

He took strong ground in favor of small farms well tilled, urging that in many cases the effort spent upon ten acres, at a loss, would pay a profit if expended on five acres.

He advocated high manuring, and urged that thirty-two horse loads to an acre is not high manuring ; sixty would do better. One Worcester farmer applied eighty cords to an acre, and found that it paid. Thorough cultivation was his next topic, and his idea was that careful preparation of the soil for a seed-bed, frequent stirring of the soil about the plants, and absolutely clean culture are all included under this head.

A good market is essential. Over production is dangerous, and it often results not so much from too many growers, but from a favorable season, giving an unexpectedly full crop of certain vegetables. The remedy suggested was the planting of a wide variety, thus securing a fair average result.

The enemies of the vegetable growers were discussed. After alluding briefly to the cabbage pests, he spoke at length of the Colorado beetle, the great enemy of the potato, and said he applied a solution of Paris green, one pound to the acre, and drove off the first crop ; a second application three weeks afterwards completed the work, and his harvest of potatoes was quite up to the average. The solution was applied with a watering pot. In answer to a question he stated an experiment where 500 pounds of Paris green were applied to the acre, and chemical analysis failed to show its presence either in the soil, the tubers, or the stalks and leaves. He did not think there was any danger in its ordinary moderate use.

In answer to a question, which five vegetables would you recommend as the best for market cultivation? He said no advice could be given. Peas, green corn, cabbages and squashes are prominent; potatoes would probably rank first in importance.

In answer to other questions he said he would apply Paris green in water as the easiest method.

Mr. S. A. Newton said he found it easier to mix the green with cheap flour, or shorts, and apply it dry with a sieve.

Mr. G. H. Harlow of Shrewsbury questioned whether Paris green is not poisonous to the plants, and told of a neighbor who lost two cows and had others sick, from eating potato tops which had been treated with it. He questioned also whether a farmer living six miles from the city could make vegetable culture profitable. He said he earned all he got twice—once in growing the crop, and again in trying to sell the crop. He thought a man near by who had a milk route could build up a trade, but a common farmer might as well give his crop away.

Mr. J. B. Sibley said he had half an acre of potatoes; he applied one pound of Paris green in twenty pounds of plaster, and the second crop of bugs got three pounds of the green. He applied it with his hands, and gave an amusing experience of a dog which ran through the field and got himself covered with the poison, without injury.

George S. Coe of Shrewsbury said the cows which died in that town drank rain water which had been caught in buckets tainted with Paris green.

Mr. Harlow contended that the green was poisonous, and thought farmers should use it, if at all, with extreme caution.

Mr. O. B. Hadwen suggested an inquiry from experienced men on the matter of growing special crops, and leaving the insects until they are reached in the list of subjects arranged for discussion.

Mr. Geo. H. Rice spoke of the growing of onions which usually prove a difficult crop. He found them to grow best on old ground; they will not do well on turned sward; they follow carrots very well; an abundance of manure is needed; this should be spread and ploughed in lightly in the fall; in the spring the soil is pulverized with a cultivator or harrow, care being taken not to make it too mellow; he would roll the ground if too mellow; the onion grows best on the top of the ground, and the seed should be left very near the surface, almost without covering; he would sow early in April; the best results come from rows thirteen inches apart and sown so thinly that no young plants need to be removed; frequent light moving of the soil between the rows is necessary, and in May, June and July it is important to keep the young weeds down; they may be pulled in August, carefully cured and put under shelter, when they can be kept cool; there is more danger of heat than

of cold ; he keeps his crop in the barn through the winter, and frequently keeps it until April ; his soil is a heavy clay, and retentive, but is underdrained ; it is bad to stir in the spring, and therefore he does all he can to the soil in the fall ; he thought 500 bushels to the acre an average crop ; he put fifty to sixty two-horse loads or from eighteen to twenty cords of manure to the acre ; he uses a general variety of barn manure, tannery refuse, lime and salt, in a compost ; horse manure he would compost a year before using ; the lime and salt is intended to fix the maggots ; he has used them successfully for ten years, but he would not like to say they were an unfailing remedy ; he applied them by mixing in the manure and also by sowing over the field ; he did not think freezing onions would benefit them, but they may be once frozen without much harm ; repeated freezing and thawing is bad ; the point is to keep them at an even temperature ; if they freeze they should be kept covered to protect them from thawing. Many of the points were brought out by questions from various gentlemen present.

Mr. Joseph S. Perry thought the potato crop the most important, and how to get a crop is worthy of study ; experience is most valuable, and generally the best observer will succeed best ; his own plan is to plough early in the fall; the next spring he would manure liberally, eight to twelve cords to the acre, and plough lightly ; he could not cover potatoes with a horse-hoe with success ; they do not cover evenly ; two or three inches is the proper depth ; he would run a cultivator through the field in six or eight days after planting, to keep down the weeds, and this should be repeated every week ; he hoes three times, but by using the cultivator hoeing is light work. Last year he raised 1000 bushels of Early Rose, and eight hundred of Davis Seedlings ; the latter he thought the best crop ; Yankees prefer Early Rose, but foreigners choose the others. In regard to the bugs, he found it cheapest to pick the bugs, especially as he could get boy pickers cheap ; he did not think Paris green injurious to the crop, but there is a prejudice against it, and a crop will sell more readily without it ; he would "hill up" the crop lightly ; he would plant in rows, one way, and one piece of potato to every eighteen inches ; could not afford to manure in the hill.

Dea. Edward Kendall spoke of painting window blinds with Paris green ; its poison is arsenic ; he had ground it and applied it, but he had experienced no evil effects ; he would not hesitate to eat vegetables where it had been used; it might work differently with different people, the same as other paints ; he would work in Paris green rather than in white lead.

Mr. Hadwen, in a pleasant speech introduced Mr. John B. Moore of Concord, the originator of Moore's Early Corn and Moore's Grape.

Mr. Moore expressed his pleasure at the freedom of the discussion, and compared it to the reticence of the market gardeners in the State

Board of Agriculture, who, he said, if they know anything they will not tell it. He questioned the propriety of a general farmer raising a great variety of vegetables ; he said that would do if he markets his products to families, but the best crops can be got by special culture, and by devotion to special crops ; he is sixteen miles from market, and finds better profit in raising a few crops largely ; he has a strong hold on onions ; in starting new ground there is no trouble if you are generous with the manure ; potash is essential ; hence wood ashes are valuable ; he got last year 800 bushels to the acre ; he put his rows fourteen inches apart ; two-thirds of the field, through a mistake, got twice as much seed as he intended ; they grew three and four deep, and too large for ordinary customers ; the true time to kill the weeds is before they come up ; he uses the new scuffle hoe, but it requires the ground to be entirely free from sticks and stones ; he gets over fifteen rods in three minutes ; good seed is important ; that raised at home is surest ; with his own seed he had no "stiff necks" or scullions.

He also gave his treatment of asparagus, of which he is a large grower ; it usually pays from $300 to $500 per acre ; he was the first to begin the crop in 1854, and now over one hundred acres are used in this crop in Arlington ; it requires a sandy soil and high manure ; the salt theory is a myth ; it is not a manure, and it is not a necessity to asparagus, although the books say so. He gave a sketch of the history of the plant, and of his own experience ; his best success has been without salt ; he has taken the first prize for seventeen years, at the Massachusetts Horticultural Society, without salt.

He also grows about 10,000 cauliflowers each year ; he uses good ground, with heavy manuring, to which he adds one hundred pounds of muriate of potash to the acre ; he gets all his seed from Italy, and is sure there is no good seed here ; his plants head in hot weather without fail ; a heavy dressing of salt will laten the asparagus crop, and will make it grow crooked ; he found the Conover a poorer variety than others ; he puts the crowns of his plants eight inches under ground, and ploughs over it ; every inch deeper makes the crop a week later ; his rows are three feet apart and plants fifteen inches apart in the rows ; he raises seed from only the plants which give large stalks, good color, and good shape ; he lets the first shoots run up to seed, so that there is no crossing with the smaller plants.

Mr. Rice said he had plants from a bed thirty-five years old which are better than any of the new varieties. In regard to cultivating onions he said he could not use the new scuffle hoe on his soil ; it is adapted only to a perfectly pulverized soil.

Mr. James Draper spoke of the difficulty of marketing vegetables ; a milk man can do well in carrying out his vegetables ; with only beets,

tomatoes and squashes, he could find a market with the dealers ; potatoes alone are a good crop, and there is always a market ; his advice was to stick to two or three varieties.

Mr. Rice said his experience is best with large quantities of a few vegetables.

Mr. Draper spoke of the garden crops brought here from abroad, and said this is one of the best markets, if the farmers would only improve it intelligently.

Mr. Merrifield spoke of the importance of good seed, and also of the need of energy in improving and occupying the market.

Mr. Hadwen spoke of the necessity of good seed, and suggested that Worcester farmers might find their interest in raising each some one variety of seed, with a special view to securing pure seed and of the best quality.

Mr. Sears related his mishaps with so called choice seeds, and expressed the opinion that local growers should grow their own seed.

Mr. C. L. Hartshorn said he had dipped into almost all vegetables in connection with his milk business, but was now holding up ; consumers have been reduced and producers have increased of late, and he finds it almost as profitable to feed his vegetables to stock. He has grown tomatoes for years ; Boston Market is his dependence ; Trophy he discards ; Gen. Grant and Canada Victor do fairly, but are not reliable ; with Tilden he has not had as good luck even as with Canada Victor ; the Hathaway looks well, and if picked before fully ripe is excellent ; for growing in a family garden it has no superior ; he would trim the vines at the ends, but would leave vines enough to shade the fruit.

Mr. J. C. Lovell said he always sets his plants the last day of May or the first day of June ; if set earlier they will fail. Messrs. Draper and Sears concurred in this view.

Mr. Sears advocated well rotted manure and superphosphate for fertilizers ; the latter gives earlier and better fruit, while the former makes prodigious vines. His pet variety is the Canada Victor ; it ripens a good quantity early, while other early varieties ripen only an occasional specimen.

The value of various vegetables for stock was then briefly discussed. Mr. Sears said he considered cabbages worth half a cent a pound for feed for milk. Mr. Merrifield said he had, after experiment, decided in favor of mangolds and sugar beets for stock. Mr. Hadwen said he was strongly in favor of roots as a change of feed. Mr. Sears concurred, but objected to their excessive use. Mr. Moore said his neighbors fed only English turnips, tops and all, which he thought a safe way of watering milk. Mr. Merrifield said he preferred cotton seed meal, Indian corn and shorts as more economical than roots. The meeting then dissolved.

ORCHARD FRUITS.

THEIR CULTIVATION, STORING, AND KEEPING.

Considered by the Society, February 17th, A. D. 1878.

Mr. Joseph C. Lovell, of West Boylston, introduced the subject. He pointed out the different circumstances of the fruit growers, for home use or for market, the single tree or the large orchard, the early summer or the long keeping varieties. He said one general rule is that growers must study. The question of fertilizing is important, for too little and too much are alike disastrous; insect ravages need constant watching; the soil for one variety may cause others to fall, and various methods of treatment are only adapted to certain varieties. He favored attempts to improve the quality of some approved varieties, rather than to produce new varieties, and he suggested the question whether raising seedlings from carefully selected healthy trees, may not be a help toward eradicating blight.

He favored only moderate fertilizing, for too much will enfeeble the tree. Varieties can only be selected to adapt the crops to the individual want; no general rule can be given. He gave a caution in regarding planting, that there should be abundant room for roots, and the tree should be set as deep as it stood in the nurseries. The best soil for Apples and Pears is a strong deep loam on a hill side; the soil should be frequently stirred about young trees. He would gather winter fruit only when it is fully ripe, if quality be desired; for storage he would select a dry cellar with a uniform temperature of from 34° to 36°. He urged every tree planter to be sure and give clean culture, and a fair chance to his trees, before condemning the nurserymen or the stock. In answer to questions he said he could not recommend either apples or pears for a crop to the exclusion of the other, but would advise a grower to have good stocks of both.

Mr. J. E. Phelps said fruit trees should be headed in and the roots carefully pruned in transplanting. To reset trees with the roots jammed off with a spade is folly. He would set no trees over two or three years old ; larger trees will be the smallest in ten years. Peaches should be set one year from the bud and pruned so that only a "stub" is left. He would prune the roots, even if the tree is taken up without injuring the tree ; the cut portion will throw out many new and vigorous roots.

Mr. Sylvanus Sears gave his experience ; in moving young trees he would cut off the roots not over two and a half feet from the tree ; he had observed if rough wounds on roots are left there is a decay and injury ; a smooth cut root will heal quickly and throw out fresh rootlets. He had transplanted ten year old trees and grafted them immediately, with good results. He favored the growing of both pears and apples ; by judicious grafting the barrenness of "the odd year" can be overcome ; early apples, if properly cultivated will bear every year ; one of his Early Williams trees has borne twenty-one years in succession. He believed in apples as a crop, even with the "odd year" and the trouble from insects. It costs less in proportion to harvest a large crop than a small one.

Mr. Phelps thought it would be better, in transplanting large trees for grafting, to let them grow a year before grafting. In storing apples he had the best success in picking them in a warm day in September, and putting them into the cellar while they are warmer than the cellar ; there is no need of waiting for the fruit to "sweat" before putting in the cellar.

Mr. Lovell said his view is that "odd year" fruit is an accident ; there is no rule by which the habit of trees can be changed. In regard to putting apples in the cellar as soon as picked, he thought it would only be safe in a dry cellar.

Mr. Phelps said he would do it with a cellar either damp or dry ; he had tried both. He also defended the "odd year" idea, that it can be changed by grafting ; he stored his apples in barrels without heading up, and left them open for a few weeks.

Mr. Joseph Lovell gave his experience with "odd year" Baldwins ; he bought six trees in 1845 for "odd year" trees, and only one proved true to the name.

Mr. Sears said a tree, a part of which was grafted an odd year and part an even year, has for fifteen years borne in the same manner ; the grafts set in the odd year fruit in the odd year, and *vice versa*. His practice is to pick his apples and put them into barrels and leave them in a storehouse, above ground ; he was sure all apples sweat after picking ; he had tried to keep apples in large bins, but the result was unsatisfactory.

Mr. F. M. Marble said there is a difference in the keeping qualities of apples, in different years, irrespective of their storage. He believed good tillage land cannot be profitably used for apples ; but the trees may be set on the north side of fields and against the roads with profit. His experience is in favor of pruning both top and root at transplanting. He believed pears are more profitable in this vicinity than apples, and thought they can be raised as cheaply.

Mr. Phelps opposed pruning in the spring ; the best time is from the 4th to the 24th of July, while the tree is resting between its first and second growths ; he urged experiments on the same tree.

Mr. Draper said the best rule for nurserymen is to prune when the knife is sharp ; on young trees he would do all knife pruning early, before the buds start ; if large cuts are made the wound should be covered with shellac. In regard to resetting trees he would always set a tree two or three inches deeper than it stood when taken up. He favored setting small trees, for they will do much better. He also said too often customers insist on having trees taken out of nursery rows, when it is impossible to take up one without spoiling three, when, if the trees could be taken a whole row at a time the removal could be much more safely accomplished.

Mr. J. C. Lovell reiterated his opinion that trees ought to die if they are set carelessly and the ground about them is allowed either to fill up with grass or weeds ; the nurserymen are not generally to be blamed.

Mr. F. J. Kinney said apples can be grown at a profit in this vicinity ; he knew a three acre lot, two sides of which has apple trees, which give better returns five years in succession than the rest of the field, although it is in so good condition as to bear ninety-two bushels of wheat. He opposed spring pruning, especially for large trees ; the only time is when the tree is at its fullest growth. He was a full believer in odd year Baldwins ; he knew of hundreds of trees which are sure for a crop every odd year ; his own "odd year tree" is certain, and scions taken from it give odd year trees, whether grafted the odd or the even year.

Mr. Draper made a distinction between heading in and pruning ; the first should be in the spring ; the latter between June and September.

Mr. Phelps would head in trees when set, either fall or spring.

Mr. J C. Lovell favored severe heading in in the spring before the buds start ; he would leave autumn set trees till spring. In answer to a question, he said barn-yard manures will promote tree growth ; the patent fertilizers are good also.

Mr. A. B. Lovell said he had a good orchard set in a sand bank ; over ninety out of one hundred trees lived, and they have made capital growth ; the land has been generously manured with barn-yard manure and wood ashes.

Mr. Draper would give trees wood ashes and bone ; if stable manure is used it should be applied in the fall.

Mr. A. B. Lovell said he had raised corn on his sand orchard eight years running, besides gathering the apples.

Mr. Marble reiterated his statement that good land will not give good returns in apples ; in twenty-five years experience he feels sure it would have been cheaper to let the land alone and pay the taxes ; he could get no crops under the trees, and the bother and expense of pruning, bug killing and harvesting cost more than the income during this period.

Mr. Sears favored setting trees about the margin of fields ; the roots were under the walls, utilizing all the ground, and the trees thrive better than in a fully set orchard.

Mr. Newell Wood, of Millbury, said Mr. Marble's trouble was that his soil needed underdraining. He thought it poor economy to set apples about the walls ; they do better in an orchard where they can be tended. He considered a sheltered site for an orchard important ; after trees come into bearing, ploughing in of clover is one of the best fertilizers ; he spoke heartily in favor of this method of fertilizing for general crops ; he had observed that his orchard bore excellent sized fruit, even in the dryest season, which he thought due to the clover. For pears he applied manure from the barn cellar, ploughing it in the fall ; he would prune whenever he saw a place to prune ; the knife should always be within reach. Peach trees need heavy pruning late in the fall. He would cut off large limbs in the fall, as there is less liability to decay.

Mr. Joseph Lovell said if Mr. Wood's practice of pruning was in ues there would be no occasion to cut off large limbs.

Mr. Sears had had good results from November and December trimming. To trim in the summer would spoil the grass under the trees ; he had seen no important difference between winter and summer pruning if large wounds are protected with shellac.

Mr. Wood insisted on mulching young trees after setting, as of the greatest importance.

Mr. Thomas Harlow, of West Boylston, said he knew of two or three orchards where the bearing year has been changed by the canker worm. He suggested that if trees are taken from a heavily manured nursery, it will be important to give them rich food afterwards or they will make a bad showing.

Mr. Kinney spoke of a case when in a six or eight acre orchard, on a steep side hill, the owner picked every blossom for the first two years, and the result was full crops in the odd years, and the owner had got rich on one orchard, which an ordinary farmer would refuse at any price.

Mr. Sears intimated that experience has been that trees so treated after a few years get back to the general habit of bearing on the even year.

He had seen similar results where the canker worm did the removal of the blossoms ; after three years the Baldwins bore half a crop every year.

Mr. Draper said apples demand only half the manure necessary for pears.

In answer to a question by Mr. S. C. Andrews, Mr. Merrifield said leather ashes would be of value.

Mr. Geo. S. Coe, of Shrewsbury, said apples should be picked when they show signs of maturity ; this will vary with different seasons ; one season his picking was interrupted by frost and snow ; when the snow was gone he finished picking, put the apples in a pile in the cellar three and a half feet deep, and two months after they were in admirable condition for shipping.

Mr. J. Frank Allen said Northern Spy, Spitzenberg and Newtown Pippins in his cellar this season, from the West, showed as severe worm ravages as though grown here ; he thought the worms have "gone West." The two first named kept well, and are still in good condition. He thought native apples have kept poorly.

Mr. Sears thought city cellars too warm for apples ; in his own cellar Roxbury Russets keep till April, and then they are in condition for market without picking over. His own fruit has kept well this season.

Mr. Draper said in full bearing years apples are so plenty that many growers pick carelessly and the price goes down. If growers will take extra pains in such seasons they will get a satisfactory reward.

Mr. Allen expressed a belief that apple culture about Worcester will pay, and related instances of good success ; if the farmer takes care of his trees apples are are as good a crop as he can grow.

Mr. Harlow did not believe in setting trees in good tillage land, but only a few farms have such land ; most land is just adapted to orcharding, but it is not fit for tillage. He thought the expense of an orchard from the start will more than absorb the profits, even after they come into bearing.

Mr. Pierce, of Millbury, said he thought apples a profitable crop ; even last year, were it not for the hard times, the crop would have paid. He thought most apples are picked too green ; early picked apples are inferior in color, flavor, and in keeping quality ; fruit will keep best on the tree ; this is true even of pears ; he did not believe in "odd year" trees ; he had seen scions from "odd year" Baldwins which bear the even years, and even the original trees have reverted to even year bearing.

Insects and other Enemies of Fruits and Flowers.

Considered by the Society, February 14th, A. D. 1878.

The subject was introduced by Mr. F. J. Kinney, whose remarks, with the discussion that followed, are thus abridged :

Mr. Kinney considered that the doors to success or failure in growing fruits or flowers hung on this very text. He first treated of other enemies than insects, considering man as standing foremost on the list, by having for his main object how much money he can get out of a tree, forcing it into a premature existence and into an appearance of age by being over manured, and in any and all ways to make it tall in the shortest possible time. The fault he considered was with the purchaser, not the grower, as the latter produces what the former demands. He expressed the belief that the treatment a tree receives in the nursery to make it saleable weakens its vitality and prepares it for an easy prey to its insect enemies. Considering the insect enemies of apple trees, he first spoke of a species of sphinges as perhaps the most dangerous, because they deposit their eggs near the ground, under a piece of loose bark and out of sight of the casual observer. The young caterpillars or borers begin operations as soon as hatched, and, although one in a tree may be discovered before it has done much damage, by the chips of his trade, if there are several eggs deposited around the tree and all hatch, the damage may be considerable in a short time. Probably more trees are spoiled by them than by all other insects combined. They seem to live three years, one in the bark, one in the wood on their work of destruction, and the last in boring

a hole from four to six inches long, so that the injury is lasting. Many trees come from the nursery containing eggs or small caterpillars, especially the larger ones. For a remedy, the trees should be carefully examined before planted, scrape the loose bark carefully from the base, make a mound of wood ashes or other manure around the base and from six to eight inches high, a small circle only around the body ; remove the mound in July, spreading it over the ground, and be sure no eggs have been left. Make another mound in September, and allow it to remain till it thaws in spring. If the borers are in the wood dig them out, being sure to kill every one. A wire with a barbed end run into the holes will usually do the work, but sometimes it is necessary to use a brace and bit, chisel and mallet, covering the wound, if it is much of a one, with grafting wax. The tent caterpillar next received attention, its destruction by attacking the eggs or by crushing the pests when in the tents being urged. Another enemy considered was the lappet caterpillar, which is found on the leaves eating in the night ; hand killing is best for them. For canker worms tar and lard mixed and spread on a paper band he considered a good remedy, and bark lice can be taken care of by washing the limbs occasionally with a strong solution of potash. Plant lice should be treated to a solution of strong carbonate of ammonia, using half an ounce to a quart of water, and applying with a syringe, force pump, wisp of straw, or corn broom. For the coddling moth the plan of A. Greenman of Lockport, N. Y., was recommended. The pear is subject to the same insects as the apple, and has also plant lice which can be destroyed by the ammonia solution, a dressing of wood ashes, or air slaked lime. Blight, the speaker believed, to be caused by an insect that bores into the heart of the limb at the base of a bud and eats off the inner grains, causing the leaves and limb to die ; cutting the limb below the seat of the disease and burning is the sure remedy. He advocated treating the *exitiosa*, an additional enemy of the peach, by the use of the scraper and knife, or fire, if their progenitors can be caught. He spoke of the quince as not having as many enemies as the apple, but subject to the attacks of the borer and leaf slug. The greatest enemy of the grape he considered to be the thrip, with no remedy that he knew of; but for the plant louse which works at the roots he would use slaked lime and salt. Strawberries he spoke of as having no enemies, save the corn grub and black flea, which breeds on old beds from decaying leaves. Their habits he wanted to study further. For the currant worm and leaf hopper slaked lime when the dew is on he found effective. He also recommended giving the insects which affect flowers their full share of attention.

Prof. Stockbridge, of Amherst was called upon, and referred to the importance of dealing with man as the first enemy of the plants, as he shortens their lives by forcing and producing early maturity, which causes early decay. The only way to success in any department, he con-

sidered, was close and persistent work. He had heard it stated that the losses in this country from the work of insects is over $300,000,000 annually, and considered the subject as one justly deserving the most careful attention and most thorough experiments.

Leander Wetherell, Esq., also spoke of the importance of the subject, and of the insect as the greatest pest of the farm and garden, saying the man who learns to protect the crops from it has accomplished a very important work in the field of industry. He spoke of the canker worm as the greatest enemy of fruit growers, and wondered that no device has ever been perfected which will effectually keep him from the trees. Mr. Pierce, of Arlington, one of the greatest fruit growers in the state, had succeeded by diligence, tar and printer's ink, and the latter was most strongly recommended. A portion of Mr. Pierce's success was due to his pruning, his apple trees being cut the first or second week in June. He believed in taking off the wood when convenient, but in leaving a stub of six or eight inches, which is again cut in June and carefully covered with grafting wax, always healing and increasing health and fruitfulness. He also used a mulch under the trees to catch the early apples, which would then bring a good price in the market. Caterpillars, he said, should be treated by cutting down the hedges of wild cherry trees, the harbors of these pests, and attacking the pests when they are in the tents and crushing them. His remarks referred to the apple, which he considered the most profitable crop for farmers to grow, and he spoke highly of the value of odd year Baldwin. He spoke a good word for the birds as among the best of the insect destroyers, and would sooner divide the cherries with them than the trees with the insects. Skunks were also spoken of as a great destroyer of garden insects, and crows were considered as the farmer's coworkers and as standing at the head of the insect destroyers ; although they pull corn he believed it better to protect the corn for a time and preserve the crows. He also recommended highly the culture of flowers as yielding a most important influence everywhere.

The discussion turned to the work of insects on shade trees, Mr. Wetherell considering the rock maple as freest and Mr. Hadwen speaking of the beech and ash as affected only by caterpillars.

Mr. Hadwen spoke of insects as demanding the attention of man, and not being left to nature. The ravages of the canker worm were referred to, and the importance of diligence in fighting him strongly urged, printer's ink being recommended as one of the most effective agents for its destruction. The importance of getting ahead of the worm was strongly presented. The codding moth he believed could be conquered by industry and study, and thought favorably of a solution of soap, tar and water, which is also effective in the treatment of the curculio. The coddling moth miller he had caught by putting a light in a barrel and covering the inside with a sticky substance, but had not tried the experi-

ment long enough to pronounce fully upon its value. Speaking of the currant worm he would deal with him with white hellebore, but the worm which bores into the wood and down through the pith he thought could be dealt with only by cutting off the affected part and burning. The enemy of the quince, which has been called the terminal blight, could be treated, he thought, only by cutting back and burning the wood. In speaking of the cultivation of roses, the thrips which are found on the under side of the leaf should be destroyed by a solution of hellebore and water, two spoonfuls of the former to a pail of the latter, applied with a syringe. They appear in the spring and fall. The rose slug can be disposed of in the same way. Birds he was fond of, but didn't like too many. He knew robins would destroy fruit and leave the insects unmolested, especially the caterpillar. In cultivating cherries he set fifty trees, early and late varieties, and didn't succeed in marketing one, as the birds got them all. He believed birds could be destroyed legitimately by the destruction of the eggs, and that a man had as good a right to take birds' eggs as hens' eggs. He again urged the importance of non-dependence upon birds for the destruction of insects, and believed the snowball insect could be destroyed by a solution of tobacco applied before the leaf curls.

Mr. William H. Earle spoke a good word for the birds as a friend of the horticulturists, and had never been seriously damaged by them while he had been much benefited. He advised the protection of the birds. The currant worm, curculio, codling moth, pear blight, white grub and black flea are the enemies they had to contend with. The codling moth he thought could be caught with a lantern placed on a block in a pan of water and left burning. He agreed with other speakers in their methods of destroying other insects, although the black flea is a subject for further investigation.

Mr. Hadwen gave his experience with birds, stating that they had proved destructive to his Blackberries and Delaware Grapes.

Mr. Earle again spoke in defense of the birds, and Mr. Kinney spoke of the ravages of the black wasps among his Grapes, and the protection he got from the robins.

Mr. E. W. Lincoln spoke of air slaked lime as effective in protecting the cherries from the green fly and the currant from the currant worm, advocating its use as a powder. He thought the farmer was cutting his own throat in destroying the crow, as he is the greatest enemy of the grub, which is most destructive to the grass fields and the corn. Dividing fruit with birds he considered an impossibility, as a robin will not touch an insect when he can get strawberries and cherries, as he has better taste. Speaking of the value of birds he said, although the birds are increasing the insects keep up with them, and he believed the introduction of the English sparrow would be repented in sack cloth and ashes.

Mr. Marble also spoke of the ravages of birds, and Mr. Harlow spoke of their value. Mr. Hadwen said he spoke of the birds as a horticulturist, and not as a farmer, and all he asked was the protection of those who gave their time and money to the growth of choice fruits. He did not wish to be understood as advocating an indiscriminate slaughter of the birds or allowing boys to prey upon them. Mr. Wetherell again spoke a good word for the birds, and Mr. Hadwen again spoke of his remarks as applying to robins, and did not wish it understood that he favored their killing, although he thought the horticulturist entitled to protection. The discussion was further continued by Messrs. Wetherell, Lincoln, Hadwen and Kinney, the latter considering that the ravages of the white grub were largely due to the destruction of the crows and robins He also spoke of the common angle worm as an injury to small fruits, instancing a case where they had proved very destructive to Jucunda strawberries, and he had used hot slaked lime to destroy them.

Votes of thanks were tendered Prof. Stockbridge and Mr. Wetherell

The Twelve Best Annual and Perennial Flowering Plants.

A paper read before the Society, by Mrs. Thomas L. Nelson, March 7th, A. D. 1878.

I have no intention of taking up your time in reading an elaborate essay on the subject before us to-day. With the limited experience I have had I do not feel competent to read a paper before this Society, but I have been invited to do it, and, with the hope of inspiring courage in the hearts of our ladies, shall proceed to enumerate a few plants which I have cultivated more or less, and tell what I know (or think I know) about them. I am well aware of one fact, however,—no two persons in this hall would, if called upon, name the same flowers as *best.* Each person has his or her own idea, and this meeting is, if I understand it aright, for the purpose of, in a measure, comparing notes.

Foremost among hardy plants I place the Rose ; no garden is complete without it. The chief difficulty seems to be insects, and with care they may be kept in subjection.

The finest among June roses are Mad. Hardy, Mad. Plantier, the Damask, and the mosses. I also take in the old white rose, which to me is the sweetest rose grown, but either through neglect or because it is not as much of a favorite with others as with myself, we rarely find it in gardens at the present day. Then the hybrid perpetuals in every shade from white to darkest crimson, *they* surely must have a place. What if they do bloom sparingly after the first general bloom is past ? Are not a few scattering roses more precious because of their scarcity ? Of course all the climbing roses are desirable, and we have only to choose which we will have. And branching from my subject, the roses we call tender, the ever-blooming class, Tea, Bourbon, Noisette, and Bengal, are *almost* as hardy as the hybrid perpetuals. I wintered successfully more than a dozen last winter. I should as soon think of wintering tender roses in the ground, as hybrid perpetuals. If either are not strong, healthy plants, the probability is they will die.

Next to the rose is the Lily. In almost every garden we find the white lily (Funkia Alba,) with beautiful light green leaves, thriving in almost any location, producing its pure and exquisitely fragrant blossoms day

after day for weeks, and it is well worth cultivation. Cerulea is quite similar, except the flowers are smaller, light blue, and the foliage a deep green. There is a variegated variety (Marginata) with mauve colored blossoms. All are perfectly hardy, and do not require the slightest pro-protection. Candidum blooming in June, Longiflorum in July and the Japanese in August, are the most common with us ; these are all hardy, with the exception of Auratum and Longiflorum, which should have a dressing of leaves or coarse manure. There is an almost endless variety of hardy lilies, which will thrive in the same soil with precisely the same treatment. I wish some one in this vicinity could produce the wonderful bloom of the Auratum lily, which was brought from somewhere on Cape Cod, and exhibited in Boston, at Horticultural Hall, in 1876. It stood higher than any man in the hall, and had, I can't remember just how many blossoms, but I think more than one hundred and twenty buds and blossoms. I asked the man who exhibited it how long a time he had grown it, and he said that was the third time it had blossomed.

The Pink stands high in my estimation. The hardy pinks (those that we call the old fashioned pinks) we all know are easily grown. The Dianthus is one of our most valuable annuals. The old Chinese have been carefully hybridized with Heddewegii and other fine varieties, thereby producing many new and splendid varieties. Seeds planted in the spring, in good soil, produce plants which bloom during the summer and autumn even after hard frosts, and if care is taken to give a slight protection, they make strong plants for the next year, and, indeed, for a number of years. Dianthus Barbatus (Sweet William) is growing in favor, and as it is perfectly hardy, blooms freely and in exceedingly rich and beautiful colors, give it a little space and you will not be sorry. Carnation pinks are almost hardy and need only a few leaves thrown over them to insure a profuse and beautiful bloom in summer.

The Petunia is almost invaluable in the garden. Blooming when quite small, and continuing to bloom late in the autumn, it is no wonder it is a general favorite. I am speaking more especially of the single varieties, striped, blotched, mottled, fringed, small and large, light and dark ; often coming up year after year and blooming profusely in the blazing sun. One paper of seeds will produce hundreds of plants. The double varieties come more properly under the head of bedding plants, and are not altogether a success grown as annuals.

The Aquilegia is in high favor at the present time, and one reason is, it has, in a measure, been allowed to die out, but it has been found that no flower can take its place, and I find that this is a growing feeling among the people ; old plants have been thrown away to make way for new ones, and finding them almost worthless they go back to the old tried friends of their early days. I say no flower can take its place, *for this reason* : all of the Aquilegias, as far as I know, are natives of cold cli-

mates, many from Siberia, and one of the newest, Cerulea, comes from the Rocky Mountains, and all of the rest are found in high latitudes. There are a great number of beautiful varieties, but I think the most beautiful of all are Cerulea, blue and white, and Chrysantha, the "golden spurred columbine." Coming, as they do, from cold regions we can at once see how very valuable they are, or may be, to New Englanders. Our wild varieties are easily transplanted and readily adapt themselves to their new location.

The Clematis needs not to have its praises sounded. It shows for itself in many gardens in this city. Blooming freely where many plants fail, and in so many different shades, from the large white varieties, and small jessamine like flower and foliage of flammula, exquisitely fragrant, through the different shades of mauve and purple, to Jackmani, who wears the purple of the king right royally. Of the Phlox family enough cannot be said. In the hardy varieties, instead of the three or four varieties of years ago, we have an almost endless number of varieties, and as they are constantly being added to, we have a great many to choose from. Some kinds blooming earlier than others, if we are careful in making our selection we can have a succession of bloom. The hardy procumbent phlox (moss pink) every one is familiar with, and it is useful for edging. Phlox Drummondi is valuable both for massing and cut flowers. It really requires very little care after the plants are fairly started, and it is to the annuals what the geranium and verbena are to the tender green house bedding plants. In fact it is a most formidable rival to the distinct and brilliant flowering plants. And here let me mention a class of annuals and perennials which I consider of great value: The Gypsophila muralis, a low growing, small pink annual, so light and delicate it seems almost as if to take it up would crush it, still it keeps some time in water, and I think it is very lovely. Paniculata, hardy white perennial, flowering in panicles on thread-like stems, very useful with other flowers, giving a lightness unsurpassed to a bouquet or dish of flowers. It is also useful for winter bouquets, drying like immortelles.

Sweet Peas should be in every garden. Plant them as you would garden peas, in wide, deep drills, and do not make the soil too rich, or you will have more vines than blossoms. Some of the perennial varieties are beautiful, but they lack the fragrance of the annual.

The Pansy is a general favorite, and many cultivators are very successful in raising plants from seed. Nothing is easier. Plant in boxes in the spring for fall bloom, and in the ground in August or September for spring bloom. Get the plants well started, if in the ground, and cover lightly. If in the house or frame, set them in the ground as soon as it is free from frosts.

The Tropæolum, or, as we call the species which is grown in the open ground, Nasturtion, is a rapid grower and free bloomer, blooming all the season through, and after hard frost still gives its bright blossoms. Canary-bird flower is another species, and its lovely bird-like blossoms, a bright yellow, I should be sorry to miss from my garden.

The Morning Glory is perhaps as well known as any climber. Convolus Major, its true name, is sometimes classed with Ipomœa, of which there are many beautiful varieties. The Cypress Vine belongs also to the Ipomœa family. Among the first flowers that I cultivated (and I commenced quite early,) was the Morning-Glory, and well I remember my circle of Morning Glories in the centre of my flower bed. If we have a tree or stump to cover we can readily cover it, with only the trouble of planting a few seeds. Often they come up themselves in the same place, after being once sown.

The Aster is very easily grown. I have never found a place in my garden where it would not grow. I think almost any kind of soil suits it, and it really requires little care after setting the plants. I wonder very much when I see people buying Aster plants, why they do not buy seed and raise plants for themselves. They pay willingly twenty-five cents per dozen for plants, when in a small box they can easily raise, with an outlay of ten cents for one paper of seed, at least four dozen of plants.

The Balsam is not so easy of cultivation as some of the annuals. That is, it requires more care than annuals that can be sown, and left by simply thinning, like Mignonnette, Sweet Alyssum and Candituft. The plants must be transplanted, or you are very sure to have single blossoms. I saw very fine plants last season in this city, both in the ground and in pots. Great care must be taken in selecting seed. I think I have had more poor Balsam seed than of any kind.

Snapdragon is very beautiful and is very easily grown. I grew some last year, and could see no difference between those plants grown in sun or in partial shade.

And now I have named a few of my favorites I take the liberty to speak on a subject. which is of great importance to people having but a small piece of land to cultivate, namely, what are called bedding plants. Of course they are green-house plants. As this essay is merely to provoke discussion, I expect to get more ideas than I can give. I sincerely hope you will set me right where I am wrong. There are a great many people in a city like this who are changing their location from time to time, and of what use to them is the plant that gives little bloom the year it is set out? Annuals, except a few that almost grow themselves, they think are difficult to start, and the main resource is bedding plants. The Geranium is perhaps the most popular, because it is very easily grown, both in the house and in the garden ; and nothing can be more effective than

a well-grown Geranium, finely bloomed. The Pink is also a great favorite with this class. Feverfew is invaluable, and well repays the small cultivator. Verbenas are not to be surpassed for a small mound or bed. We make a great mistake, however, in waiting to set out our verbenas and pinks till it is warm enough for very tender green-house plants. The frost that will kill Salvia and Heliotrope these plants do not mind. Even if the leaves do turn a little from cold, after they are sét, it will not injure them. No garden, however small, can do without Heliotrope. It must, however, be in a warm, sunny place, or it will be all leaves. Salvia Splendens, our scarlet variety, which everybody grows, needs nothing more than a good, sunny place, and a good bunch of Mignonnette is desirable. Fuchsias, strictly speaking, are not bedding plants. They are too easily broken by the wind, but I have seen beautiful specimens in the ground. Care must be taken to have the place a little shaded from the noonday sun and in as sheltered place as possible. The better way, perhaps, where you cannot choose the location, is to keep them in good sized pots, and in heavy winds and storms take them indoors. The Coleus and Amaranthus are excellent bedders, and Centaurea contrasts finely with them. Some Begonias have proved good for bedding purposes, especially Weltoniensis and some of the tuberous rooted varieties. All or part of these combined with a few annuals that require no special care, except to sow and thin out, like Sweet Alyssum and Candytuft, will make home a much more attractive place with but little labor. Nor should the laboring man think it beneath him to work a little each day in cultivating such a plot of ground. It is a rest, coming from the dusty shop, to work awhile among the flowers.

And now a word on a subject near my heart. Do not forget to give the children a place to work. A very small place will do. Remember you are giving an education that will be life long, and when one of the children asks you a question about a plant or flower, answer it in as simple a manner as possible and let the child understand what you are telling it. Let us take as much pains to teach about the flowers as we do about cabbages and beets, their habits and the best soil and location to grow them in, and you will have more flowers in this hall in the summer time than we are wont to see here now. It is not enough for the farmer to say to his boys, "sow these seeds," but he tells them minutely where, and how, to do it. Now we all know boys in the city do not have as much to do out of school as boys in the country. Consequently, as there is nothing for them to do, they lounge on the streets, thrown in contact with idle and dissolute men, and learn in due time how to fill prisons and jails acceptably. I do not say all will do this, but enough to make it worth the while to do the best we can to keep them agreeably employed. Boys do not care to go into the woods (except for nuts) simply because

they have never been taught anything about the beauties of the flower kingdom. The love of flowers is imbued in some children, especially if their parents cultivate flowers as though they loved them. God intended flowers to be a blessing to us, and if children, boys and girls, were taught to love and care for them, who can tell what the result would be? If the seed is planted and fostered, sure is the harvest.

Capt. John B. Moore, of Concord, was called out by Vice-President Hadwen, and, after complimenting the essayist, he gave some hints in regard to growing Roses. He said it is unnecessary to use very high culture; soil two spades deep, well manured and worked over, will grow them satisfactorily. He never loses hybrid perpetuals, but earths up the plants, and if the top dies he don't care, for he would cut to eight inches if they didn't die; with him they are really "perpetual," for he cuts them daily through the season. He said the rose wants a rich soil, deeply tilled; give them all they want; he would use liquid manure just at blooming time if there is a deficiency; he fills a leach-barrel with manure, puts sulphate of ammonia on top, and pours water through it; he sometimes uses sulphate of potash with the manure; he syringes the roses with salt petre water, to improve the foliage. In forcing perpetual roses, he plunges the pots in coal ashes in May, and freely waters, besides drenching the foliage; all buds are removed, and thus they ripen their wood early and get rested, ready for winter blooming. Then they are trimmed and carried into the potting room, and encouraged to start root-growth before the tops start. Then they are put in a cool greenhouse to bloom, draughts being avoided to prevent mildew.

Perrennial Phloxes, he said were condemned, but within a few years there have been many additions to the list which cannot be spared; they are very desirable, especially some of the dwarf kinds. The improvement in phloxes is greater than in any other flowers in the last five or ten years. They should be well thinned every season; two or three stalks together are enough. They require rich food; a well ripened compost is best, but special manures are desirable, either potash or phosphoric acid.

He said the perennial Larkspurs, with their variety of colors, are desirable; they too cannot be dispensed with. Hollyhocks, too, had a good word: he said some of the new ones are as handsome as roses. The Columbines he prized as highly as did the essayist. Lilies he said are easily cultivated, but must be separated every two or three years. Balsams are desirable, but the trouble is to get good seed; he did not think treatment would change double to single. He starts them in a cold frame and transplants them once there, and then sets them out eighteen inches apart, where they cover the ground. He praised Mignonnette, and Portulacca, and defended the Zinnia Elegans; in a lawn or border, it is

quite handsome, but is not desirable for parlor bouquets. He would keep them in a cold frame until they show single or double ; throw the single ones away and bed out the double ones. Pansies cannot be dispensed with, but in hot weather good blooms can only be got in shaded places. He said he had only just found out how to grow Sweet Peas. An excess of water is what they generally need. Plenty of water does wonders for flowers in a garden.

In answer to a question he said he smoked green houses twice a week, lightly, whether there were green-flies there or not ; this was a preventive. Heavy smoking he thought injurious to plants. Two light smokes on succeeding days are better than one heavy one.

Mr. Hadwen followed, saying that Capt. Moore is a farmer as well as a horticulturist ; his roses here today are the best ever shown in the hall, and his example, as to what a farmer can do, is valuable to Worcester farmers.

He gave a good word to perennial Phlox as a plant of easy growth, and growing in popularity. Many of the new specimens are well worthy the attention and pride of the best horticulturists. He also praised the Pansy, and said it can be especially well grown in this vicinity.

Of flowering shrubs he mentioned the *spirea thunbergii* and the *deutzia gracilis* as particularly good ; also, *deutzia crenata* and *crenata flore alba pleno.* He commended the Weigela, and said that Japan is sending us many desirable acquisitions.

Mr. F. J. Kinney said two flowers had been neglected today : the *lobelia cardinalis* attracts more attention than any other in the United States ; it can be easily grown in a common garden and will last for years. The other is the Forsythia which he praised almost as highly as the *lobelia cardinalis* as it blooms early, with the Japan Quince, and is a mass of bloom.

Secretary Lincoln doubted the hardiness of Forsythia *viridissima* which, in his experience, winter-killed badly.

A large portion of the audience having come in since the opening paper was read, Mrs. Nelson was requested to repeat it, to which she cheerfully consented. Hon. Stephen Salisbury moved that the thanks of the Society be extended for the essay, and that a copy be requested for publication. The motion was adopted unanimously.

ANNUAL REPORT OF THE SECRETARY.

To the Members of the Worcester County Horticultural Society:

The year that has just closed was, to the local Fruit-grower, one of chequered fortune. While seed time and harvest did not fail, doubt arose at times which would not be dispelled, whether the just and unjust were actually served with rigid impartiality. Of what avail to "pool our issues!" when no angel descends to trouble the pool!

To him who toils beneath a burning sun, when clouds and rain are required; who beholds the fruit of his labors taken from him by the plague of insects, or the greater plague of birds; and to whom blight and frost are certain, as merciless visitants: moments of discouragement are inevitable. Nevertheless the reward is sure, if slow, to the true Terræ-culturist;—the man or woman who tills the soil for the very occupation and its ample returns. They may not make two blades of grass grow where was but one before: yet robust health, a contented spirit, and the pride of personal independence, constitute of themselves solely a sufficient remuneration. They may not share in the occasional gains of trade; but they are exempt from its frequent losses, its inexplicable vicissitudes and its harassing anxieties. The old fable of Antæus, whose strength was renewed by contact with his Mother-Earth —is easily comprehended in the light of these latter days.

As a Society,—we have every reason to take renewed courage. The labor of Exhibitions is monotonous, it must be confessed: yet is not the tree known by its fruit? What then if the lesson is not lost? In our own case, *e. g.*, we find what we cast upon the waters returning after many weary days. The seed sown at our first weekly meetings fell upon receptive soil. Varieties of Fruit, then recommended by our aged and most experienced Members, but which had almost disappeared from cultivation, are re-appearing, in force and perfection, at our Exhibitions. A better taste resumes sway,—and garden and lawn are again brilliant with those old-time shrubs and plants that should never have been displaced. If our task now and then grows tiresome, bear in mind its privileges, and press forward! For it *is* a privilege, to any

but the merest dullard, to be invested with the apostleship of taste and beauty; to teach how the earth may be made to renew its youth;—how the waste places shall be trained to assume and develop new forms of loveliness.

The practice of holding meetings, at which essays should be read, to be followed and improved by discussion of their several themes; a practice happily inaugurated in A. D. 1877; was continued during the earlier months of the current year. The subjects selected for consideration were as follows:—

January	10.	Manures.
"	17.	Tillage.
"	24.	Garden Vegetables.
"	31.	Hardy Ornamental Trees, Shrubs and Plants.
February	7.	Orchard Fruits, their Cultivation, Storing, and Keeping.
"	14.	Insect and other Enemies of Fruits and Flowers.
"	21.	Diseases of Fruit-bearing Trees and Vines.
"	28.	Small Fruits—Modes of Cultivation.
March	7.	The best dozen Annual and Perennial Flowering Plants.
"	14.	How can we Utilize the Waste or Unimproved Land of New England?

Members of our own Society, of coquate tastes and pursuits, gladly yielded the ripe results of their observation and reflection. For that object teaching has apt, if enforced, scholars, among our active associates, has been apparent for a long time to your Secretary. The Frugivorous and Granivorous bird, and insect, at last exact that attention so long demanded for them in these Reports; and even Olean Street and Sunnyside concede that, as concerns the *Turdus migratorius*, there is slight odds between grist and toll. Florists and Pomologists, from distant parts of the Commonwealth, paid ready heed to our request, and not only instructed us, orally, but delighted our eyes with a modern and Yankee Feast of Roses. The audiences, it is a pleasure to state, were appreciative and large: in some instances, so large as to test the capacity of the Hall of Flora. This was notably the case whenever matters of Floriculture were to be treated. For the ability to master, and expound, that branch of Horticultural learning, was amply vindicated by one to whom our Society has been indebted for continuous encouragement; while the rapt attention of the throng in attendance plainly manifested the powerful attraction of the subject for her sex.

Nevertheless it is obvious, if these meetings are to be kept up in future, and to be fraught with that positive instruction without which

they are but a mere waste of time, that there must be a decided change in their character. There can be no such thing as *fiat* Terræ-culture. It required the sweat of the brow, and plenty of it, at that, to grow Strawberries upon Sunnyside, throughout the heat of last June. Not even "Sovereigns of Industry" can proclaim—Let there be berries! with absolute assurance of a crop. An order to cease their ravages will scarcely be heeded by the insects on Olean Street, upon whose myriads incessant war has made but slight impression. The future apostle must sit at the feet of Gamaliel, that he may be qualified to teach. A Society like this should be able to place in requisition the most ample learning: should not be satisfied with inferior service. Its Members will do all that is within their power: but they can admit, without affectation of humility, that there are acclivities and summits of knowledge which they have had neither leisure nor opportunity to surmount. Why then, longer, impose a tax upon good nature, which has already sufficiently responded; or, without necessity, subject ourselves to wearisomeness under vain repetitions. If we will thresh the same old bundle of straw, we must content ourselves with chaff. Yet why not meet the conceded demand with a suitable supply? Are we so anxious to talk, ourselves,—that we cannot, or will not listen? Amherst rejoices in Goessman and Stockbridge: Cambridge felicitates herself upon the world-wide renown of Goodale, Sargent, and Gray. Would not a course of lectures from any one of those eminent savans,—*Scientiæ doctores*,—be of vastly more worth, than the spasmodic utterances that must otherwise constitute our sole poor reliance for the future? A partial test of the attractiveness of Botanical instruction has been had during the past summer, in this city. Might not the measure of success be greater, were the experiment tried upon a more generous scale, and with larger appliances? It is doubtless a good thing to exhibit flowers. Would it not be better to show the inexperienced in what simplest manner they may be grown? This Society was incorporated by the General Court, some thirty-six years since, for the purpose, as explicitly stated in the Charter, of "advancing "the science and encouraging and improving the practice of Horticul-"ture." Somewhat of its actual achievements may be estimated, by those who behold the abundance with which fruit and vegetables are supplied to our markets; or that rarer charm and fragrance, wherewith garden and lawn are made to attract and delight the senses. And yet, within how limited a sphere is its usefulness confined? To how few

of our young men and women are Floriculture, or Pomology, aught but a sealed book. But why expect better things from them, so long as our own Society is needless or negligent of its Trust: supinely content with the bestowal of petty awards upon this plate of apples, or that stand of flowers!

The *Vernal Exhibition*, holden, according to assignment, upon the 21st of March last, was quite successful. A cold wave prevailed; the mercury, at 7 A. M., indicating 21° Fahrenheit. The attendance was unusually large; and, what was more unusual, continuous throughout the afternoon. The *Hyacinths* were the first that have been shown upon our tables, and were in good form for so late in the season. When Exhibitions are held, without intermission, it may be possible to have a creditable display of these bulbs. As it is, private cultivation seems to have got ahead of the action of the Society.

The *Azalea Indica* was exhibited in unwonted number. But some of the best bloomers were drawn, from unilateral exposure to the sun; an influence that is too often overlooked in the development of all plants: and others were distorted, in shape, to meet the unnatural requirements of their growers. That, however, is a fault of method which can be corrected by a severer taste. That the *Azalea*, itself, is getting into more general cultivation, is a matter for congratulation. It is easily and simply grown, has few wants, and does not exact the incessant care that is so often gladly bestowed upon plants that are apparently coddled the more, the less they have to recommend them.

The *Annual Exhibition* of ROSES and STRAWBERRIES was held upon the 20th of June, as it was found necessary to anticipate the date appointed in the Schedule. The intense heat had developed both flowers and fruit so rapidly that the risk of delay was too great to be taken. The result of the whole season has shown that the decision was wise; although, at the time, it appeared to threaten practical injustice to some of our prominent exhibitors. Some of the newer varieties of Strawberries were shown, for the first time; a pleasing indication that our members are not unwilling to prove all things, while holding fast to that which is good. Prominent among those novelties was the Crescent Seedling, of whose fecundity nothing had been lost in the published advertisements. Said one of these modest lures for the innocent:—

"I measured in my field thirteen rods of ground, which was set in the spring of 1876 with 200 plants in rows four feet apart, which produced, in the year 1877, 1,175 quarts of berries, bringing at wholesale eighteen

cents per quart throughout the season, making at the rate of 14,461 quarts per acre. This is in common field culture. Habit of plant is very strong; never has blighted or rusted, and needs no cultivation; will overrun all foul material; even witch-grass and sorrel gives way to it."

After that,—may we not sing with the humorist,—

> "Draw me a pot of beer, mother!
> And—mother! draw it *mild*."

The advertisement says that the habit of the plant is very strong. Which is precisely what your Committee on Small Fruits thought of the scent of the berries. If, however, this new variety will overrun all foul material, even witch-grass and sorrel, your Secretary is assured, upon good authority, that the COMMISSION OF PUBLIC GROUNDS, of the City of Worcester, will take all the plants of it that can be obtained. A contest for the supremacy in *Elm Park*, between this pugnacious Strawberry and the *Azalia hispida*, would be a botanical tournament worth travelling some distance to see.

The season, as a whole, was favorable to the Strawberry crop, when well cared for; and not subject to local or particular disadvantages. Rain fell copiously and at just the right times, while the berries were swelling; although a period of intense heat and comparative drought sensibly affected the later maturation. But it was amply proved, were demonstration needed, that the Strawberry-crop need not fail, where skill and diligence are applied to its cultivation: and that a market can be found for fruit of the highest excellence, when cleanly gathered and tastefully packed. It may shed some light upon future discussions of the question of tariff or free trade, to observe that, on Sunnyside at least, they expect no other protection than the surpassing excellence of their product.

A better exhibition of *Currants* was never witnessed, in our Hall, than that held during the last Summer. Yet the yield of this wholesome and but half-appreciated fruit was materially lessened by the cold, keen winds, followed by a period of very low temperature which, supervening to a remarkably mild winter and spring, blasted flower and young germ with fatal impartiality. There would have been some compensation for other injury, had that cold wave tended to reduce the yield from the Apple Orchards, whose bloom was then excessive. No degree of frost appears to impair the vitality of the Currant-Worm (*Abraxis grossulariata*) or diminish his numbers: and there can be little doubt

that he must be counted among permanent foes wherewith we shall have to strive in future. Would that all the Insect-Foes of the Terræculturist were as easily met and vanqished!

At their last Annual Meeting, the TRUSTEES voted to hold an Autumnal Exhibition, as had been customary since the organization of the Society. Subsequently, in the early Spring of A. D. 1878, upon representations from a Committee of the *Worcester Agricultural Society*, that an Exhibition, to include the products of Horticulture, was contemplated by the *New England Agricultural Society*, within the City of Worcester, the TRUSTEES, reconsidered their action and relinquished the proposed Exhibition. They also, with entire unanimity, *voted:*—

"That the members of this Society be requested to help towards the success "of the proposed Exhibition of the New England Agricultural Society, in what-"ever way they can. And that the officers of the Society be authorized to "furnish such aid as is in their power, without subjecting the Worcester "County Horticultural Society to any pecuniary or other responsibility."

In obedience to this decision, the Tables and other furniture of our Society were transferred to Mechanics' Hall, at the proper time: the Secretary himself attending, to render service, and to put in use the various appliances that long years of experiment and test have shown to be essential to the successful conduct of a large Exhibition. Valuable aid was rendered, as required, upon the Committees, by veterans whose approved knowledge has so often guided our awards. In short, it may be asserted, with full confidence, that nothing was omitted that would, in any way whatever, help towards the success of the proposed Exhibition. And, in some respects, it was a success. It yielded a reasonable return in money, which was proclaimed to be the chief end in view. It attracted a large crowd of visitors: of whom many that came simply to be amused might have gone away instructed, if benefit is to be derived from object teaching. Moreover the various articles, in their respective classes, were subjected to the judgment of thoroughly competent Committees; so that not even Florists should have pretext or excuse for captiousness or cavil. Of the actual advantage of the Exhibition to the best interests of Horticulture, there may be some question. No one can determine how much of what success there was should be attributed to extrinsic causes. Their own likenesses, in the photographic collections, seemed to be a load-stone to numbers. The works of high and low "Art," in unequal measure, proved a fascina-

tion to more. But the display of Fruit and Vegetables was scarcely worthy of the occasion; and certainly could not be claimed as likely or fit to magnify the reputation of New England. Our own Society, within its limited province, in years not so long ago, has held Exhibitions of Flowers, Fruit, Plants, and Vegetables, that were superior in every department. Those local Exhibitions were held in September, also: and but two weeks later in date.

A close analysis discloses a lack of that general and wide-spread competition which a Society, embracing within its scope all the New England States, should be able to evoke. With an exception of a few large entries from Connecticut; and a stray lot or two from New Hampshire; what was there to distinguish it from a Massachusetts,—perhaps even a Worcester County Exhibition? Of the display of Vegetables—whence-soever they came, as it is not necessary, so it is not advisable to speak. Suffice it to say that a Hall was hired for them and that they did not crowd out their Committee.

It is the deliberate opinion of your Secretary that this Society should consider the matter well before deciding to participate, by active or passive co-operation, in another similar Exhibition held at nearly the same date. If the New England Agricultural Society should determine to repeat its visit to Worcester, as is more than probable; there can be no doubt that it will be neither courteous nor polite for us to propose an Exhibition in antagonism. Yet the best interests of Horticulture, in this region, are measurably committed to us; and we have no right to be recreant to the trust. Wherein, save in the domain of Flora, is not and would not a Horticultural Exhibition, during the first week of September, be premature? The late John Milton Earle told me that Apples and Pears developed more, in the last three or four weeks just prior to maturity, than during their entire previous existence. Whose personal observation does not confirm that experience of an honored and valuable life! Can,—nay ought we to encourage the display of fruits—as specimens, that are but half or two-thirds formed?

Might it not be well—should these views meet with your approval, —to suggest to the New England Agricultural Society the propriety of selecting the first week in October for the date of their return to Worcester. Animals exhibited might then be local prize-takers instead of maidens. A more propitious season could be expected;—one that would scarcely kill a bull in his tracks. And while no injury could

enure to any class, a positive benefit might be derived by those great Pomological interests, which would be better appreciated by our Farmers were it as difficult to grow Apples as to grade calves. To induce people to engage in the cultivation of Fruit, a display of specimens should be limited to such as are perfect—which it is desirable to produce and multiply. Knurly and worm eaten samples are but evidences of accident and mishap, to which all of us are liable, but from which diligence and precaution will yield a measurable exemption. Our ambition should be nerved to achieve the utmost possible; nor should content itself supinely to accept what has been of common attainment, time out of mind.

It may be objected that an Exhibition, in October, would be too late for Flowers: and usually, such would be the case. But Societies, like the New England Agricultural, are formed to foster the material interests of their especial locality: and of these no one can over estimate the importance of the crop of *Apples*—whether it concerns health or food. Flowers—however beautiful—are a luxury, and in no wise indispensable. They minister to no imperative necessity, although deprived of them, their absence would be sadly felt. We cannot eat them: we cannot even smell them—when they are scentless or—we have a cold in the head. But of the two institutions—the Apple or the New England Agricultural Society,—the Apple goes to the head. And therefore,—that its almost countless varieties may be displayed, in their complete excellence, the season of its average maturity should be kept first and ever in view; so that Massachusetts and New Hampshire need not hold back, while Connecticut presses continually forward. The same arguments hold good, in similar if not equal measure, when we consider the *Pear* or the more important species of *Vegetables.* A genuine Harvest-Home cannot be forced into September.

Nor need Flora be slighted or, what would be inexcusable in a Society like our own, wholly ignored. Your Secretary has repeatedly urged, in these Reports, a final abandonment of the *Annual Autumnal Exhibitions.* They do not repay their actual pecuniary cost, being rather a source of expense. They are scarcely valuable as a method of instruction; the attendance upon them being usually sparse and listless. They consume much precious time of a great many Members; provoke some jealousy and more discontent; and are productive of but little apparent benefit. Doubtless they have their uses; but what is contended for here is, that those uses by no means compensate for their

palpable deficiencies and drawbacks. Now, let us suppose that the energy and resources, in great measure wasted upon these unwieldy displays, were lavished in due proportion upon our Weekly Exhibitions! Imagine a collection of *Ferneries,* under our auspices, and in our Hall: a collection such as, under other and perhaps not more congenial management, heretofore proved an irresistible attraction. Encourage the growth of indoor Bulbs, and anticipate our tardy date for their display. Magnify the customary *Vernal Exhibition ;* and excite a weekly interest by challenging and eliciting a weekly attraction! First,—spread your board! and then, send out into the highways and compel them to come in.

The expense to the Society of all its Weekly Exhibitions in A. D. 1878, was trifling in comparison with their obvious benefits. Their entire cost in premiums and gratuities was less than Two Hundred Dollars. And, of this sum, by far the most considerable amount was awarded at a single display,—that of *Roses* and *Strawberries.* By discontinuing the *Annual Autumal Exhibition* we should be enabled to make a saving, whereby it would become easy for us to bestow worthier prizes at our more frequent competitions. And if, in addition to the fixed premiums for specific articles and methods, the Committees should be authorized to dispose, at their discretion, of a reasonable sum each week, it is believed that a new and decided interest would be awakened. At present, but few can anticipate any remuneration for their loss of time. Two or three ladies, usually the same throughout the season, and of whom it may here be said that their assiduity and taste merit far higher recompense, monopolise ourpre miums for flowers, —arranged. There may be other contributors deserving recognition: but the schedule was established, months previous, and permits neither excess nor evasion. We ought not to intermit our practice of reserving a portion of our annual income for the reduction of our Debt. But, with the discontinuance of our *Autumnal Exhibition,* it would seem practicable to appropriate Five Hundred Dollars for the purpose now suggested. Perhaps it may not be possible, in our more contracted sphere, with so few gentlemen and ladies of means and leisure taking that interest in Horticulture which might well beseem them, to maintain, like the Massachusetts Society, an uninterrupted series of meetings throughout the year. If however, it should be deemed worth attempting, the knowledge that our Committees had been authorized to confer gratuities upon meritorious objects might well promote

the success of the experiment. Nor would this allowance of a somewhat wide discretion, preclude the continuance of an arbitrary schedule for specified articles, as now. But it is gratifying, if one can exhibit perfect specimens of an old favorite, like the *River* apple for instance, for four weeks in succession, to receive something more substantial than an "honorable mention" in a newspaper report. In what equal, if not greater degree, is not this to be assumed, when a lady takes pains to place upon our tables some pet plant, whose cumbrousness might well discourage, even if its health and beauty suggest the display! Such things are precisely what we want and invite: should we not make some practical acknowledgement of their appearance?

Our *Weekly Exhibitions* have been the life of the Society. But the faintest breath quivered in its nostrils when they were instituted. They awakened interest, commanded attention, and invited membership. Attracting the first flowers of Spring, they could be made, by proper direction, to fill each successive week throughout the year, with ample suggestiveness to the eye or palate, until their close with the last fruits of winter. Every Exhibition would then have a freshness that can be attained in no other way. And novelty has a charm in itself. Your earnest attention is solicited for the policy, simply outlined as it is, of relinquishing the oppressive and unwieldy *Annual Autumnal Exhibitions* and applying the energy and means absolutely wasted upon them to magnify the Weekly displays. The importance of these, conducted as now, when commenced each year, is found to increase by their own momentum. They grow large enough for convenient control, by August; yet not too large to be comprehended in detail. What they might become, if kept up through the whole year, can only be told after actual experiment. And that experiment, be it explicitly understood, managed liberally and not under the pinch of the gripes.

Since mine Uncle Toby shared his world with the fly, a multitude without number have imitated him, perforce, without pretending to the Christian grace that inspired his example. The plague of devastating insects grows worse with each recurring year. Who can tell when the *Tent Caterpillar* abode not with us? The very oldest of our Members can just recall the time when the ravages of the *Canker Worm* and *Curculio* became sadly evident. The *Currant Worm* (*Abraxis grossulariata*) is already a veteran. The *Colorado Potato Beetle* (*Doryphora decemlineata*) has settled down by the shore of the

Atlantic and in the terse phrase of Senator Hill, he has come to stay. And now there appears in our corn-fields the Indian *Cetonia* (*Cetonia Inda*) "long known as very injurious, at times to corn; and as fre-"quently extending its ravages to fruit,—particularly to pears and "peaches," into which it burrows, to their effectual destruction. This insect is described by Professor Lintner as "a beetle about six-tenths "of an inch in length, with a hard body very obtuse behind, and a "triangular thorax dark brown; head and thorax dark brown, covered "with greenish yellow hairs; wing covers light yellowish brown, with "changeable metallic tints, sprinkled with numerous irregular black "dots; underside black, hairy, andthe legs dull red. Whenever abun-"dant in its fall brood (there is also an early spring brood), it proves an "exceedingly pernicious insect, and unfortunately we know of no way "of checking its ravages but by means of hand picking and destruction "of the insects collected."

Years since, when the smoke of your sacrifice ascended continually, and your prayer at the State House was incessant that a great plague might at least be alleviated, you were told by the *Committee on Agriculture* that all effort was futile. Its *Chairman* assured you that he and his colleagues agreed with your views, but that the General Court would never accept a report in your favor. Rather would it "laugh at your calamity, and mock when your fear cometh." It is to be hoped, in this present hour of trial, that "*Moore's Concord*" may be found proof against the depredations of the *Cetonia*; or, should that trust fail, that the *Turdus migratorius* may be equal to his emergency.

But, among all the Insects injurious to man, that which is commonly known as the *May Beetle*, or *Cockchafer*, (and by its scientific name, as *Melolontha Vulgaris*, or *Lachnosterna fusca*), maintains an easy pre-eminence. Suffering from their ravages as we, in this country, do, we but imperfectly realize what a pest they can become. In Europe, when present in large numbers, they have done "almost incredible mis-"chief to such Trees as the Beech, Elm, Sycamore, Willow, Oak, "Cherry, Apple and Pear; as also to Nut trees and Vines. The grubs "will eat the roots of nearly all trees and plants, particularly those of "Cherry, Plum, Pear and Apricot trees; and Rhododendrons, Azaleas, "Roses, Strawberries, Lettuce. Some who have suffered much from "their Strawberry plants being killed, have found flowers of Sulphur, "strewed on the ground and then dug in, a very effectual method of "keeping them away. One-tenth ($\frac{1}{10}$) of Gas-Liquor to nine-tenths

"(♂) Water, or strong salt and water, is very useful for watering Grass "in the Autumn when attacked by these grubs."* The latest description of this insect, and of its habits, that has fallen under the observation of your Secretary, is so much plainer and more concise than any in the accepted works upon Entomology that it is here quoted verbatim :—

"The females lay their eggs in April and May, at the bottom of a "hole some 4 in. or 5 in. deep, which they make in the ground. The "eggs are about the size of a Hemp seed, and of a yellowish color. "They seem to vary much in number, but probably less than fifty will "seldom be found. The grubs are known by the name of White-"Worms in England, and of Connaught Worms in Ireland. They are "hatched in June or July; they have fourteen joints including the "head; their bodies are much wrinkled and of a dirty white color, with "a bluish tinge in the terminal segments. They have three pairs of "legs, one on each of the first three joints. The head and legs are of "a yellowish red. The insect in this state has no eyes. During the "first summer and autumn the newly hatched grubs keep together, "and the damage they then do is inconsiderable. Before the frosts and "rains of Winter set in they burrow deeper in the ground and, having "changed their skins, remain in a torpid state during the Winter. "They come nearer the surface in the Spring, and then feed singly on "the roots of nearly all herbaceous plants. When one year old they "are about ½ in. long. At the approach of Winter they again descend "deeper into the earth, change their skins, and remain torpid; and on "the approach of Spring commence their depredations with renewed "vigor, attacking the roots of Fruit and Forest trees, as well as those "of Herbaceous Plants. During the Summer they attain the length "of 1 (one) inch At the end of Autumn they again bury themselves "out of harm's way from frost and rain, as in previous winters, chang-"ing their skins and remaining torpid until the return of Spring, when "they are nearly full-grown, and about 1½ in. long and nearly ½ in. in "diameter. In July they descend to a depth of 5 ft. or 6 ft., and hav-"ing made oval cells in the earth, by the movements of the bodies, "lined with a glutinous secretion from their mouths, they assume the "chrysalis state. Whilst in this condition the antennæ, legs, and "wing-cases of the insect are easily seen through the thin, pale reddish

* Of this recommendation it may be remarked that it would be almost impossible to saturate the ground when parched, as now, by one of our American droughts. E. W. L.

"skin of the chrysalis. They remain in this state until the next Jan-
"uary or February, when they emerge as whitish, soft beetles, but in
"a few days become hard and of their mature color. They still, how-
"ever, remain underground until the middle of April or May, when
"they dig their way to the surface with the aid of their strong fore-legs.
"The perfect insects do not live more than ten or twelve days; their
"flight is usually slow and awkward, and they seem to be unable to
"prevent themselves flying against anything in their way. They sel-
"dom fly about till evening, resting on the branches and under the
"leaves of trees during the daytime."

A pleasant companion, truly, for all of us who have ought to do with the cultivation of the earth. Now pursuing his invisible work of destruction beneath the surface of the smoothly-shaven lawn; and again burying himself so deep as to be beyond the reach of a subsoil plough. Yet need we not mourn as those without hope. The peril is imminent: far worse than is realized by the careless or unthinking multitude. Many a waste spot in those neatly kept plats of grass, rendered possible in this country by the recent invention of the Lawn Mower; many a drooping half-dead shrub in garden or park, owe their barrenness or loss of vitality to the unsuspected ravage of this Insect. The marks of their presence are sadly evident around Webster Square, in this City; and Elm Park offers palpable traces of their visitation. They are omnipresent:—are they immortal? Mention has been made, already, of the useful application of water in a given proportion of the Ammoniacal liquor that is a cheap residuum from the manufacture of Gas. But it has been reserved for American Science to discover a simple and effective method of arresting the career of the voracious *Melolontha*. And, as it is a method requiring no technical skill for its employment, I recite it here for your instruction and benefit,—premising, as an act of justice to the *American Agriculturist*, that it was originally recommended by one of its correspondents. At first, then, you are to hang up in a tree, one or more wide-mouthed bottles. Quite a number of the beetles will be captured in a single night. From those captives, to use the precise language of the writer, you will proceed to "excision "of the prothorax and removal of the elytra." I am not prepared to affirm that the next and final step in the operation will not demand a careful manipulation whereof you may not all be capable. Yet my faith in the ability of the Members of this Society is extreme. Nor will I trifle with your curiosity which is now so highly aroused. You are

then to take up the beetle, thus deprived of its *prothorax* and *elytra* and place it tenderly in the open bill of a sprightly specimen of the TURDUS *migratorius !*

Should any one object to the delay and trouble of the preliminary dissection, let him profit from the experience of the discoverer: "When "I put a live beetle down his throat" (the throat of the *Turdus*) "he "would swallow it, but would exhibit such evident signs of distress that "I decided that this process was cruel and unnecessary."

The matter is so serious, that a further quotation may be excused:— "After I had given him three or four he would mount his perch and "wait until I could prepare another, all the while watching the opera- "tion with evident interest. He would throw back his head and open "his mandibles to their fullest extent to receive the proffered beetle "from my fingers. His appetite knew no bounds. I was astonished "at his voracity. Every day he consumed from forty to fifty June "bugs. One morning at 7 o'clock I gave him fifteen; I returned from "the office at 12 o'clock, and from that time until sunset that evening "I fed him all he could eat. During this time he disposed of seventy- "two of the large beetles! I have no doubt if I had fed him during "the morning he would have eaten a hundred!" What a precious experience have we, in this guileless narrative! How fraught with instruction to our friends and associates upon Sunnyside and by the Holden Line; along May Street and at the Elmwood Nurseries! Let them catch and domesticate their successive broods of *Turdi !* Arise with the lark and, collecting their wide-mouthed bottles, remove enough *Elytra* and *Prothoraces* to permit of an ample breakfast. During the forenoon they can pick their usual supply of luscious berries, being sure to market them before dinner. The whole afternoon will then be at their disposal, which time they will be only too happy to spend in the elimination of more, and yet more *Prothorax.* Blissful millennium! Charming Arcadia! Though I may never behold another Centennial, nor indulge an errant fancy in that dream of Fair Women which bewitched England's Laureate; yet, let my eyes but feast upon this vision of Perfect Horticulture, realized, and life will not have been in vain. In comparison, how insipid appear the Apician banquets of the Grange! or even those seductive Huskings whereto the "Work" of the Sovereigns is so often but an insidious lure!

Of other Insect-Foes what shall be said! What language shall do justice to the *Caterpillar* of Protean form and countless myriads; with-

out *Elytra* to be removed, but for which the *Turdus* alas! betrays no hankering. How describe the multitudinous swarms of *Rose-Chafers* that infested our Vineyards and which Mr. Kinney could only measure, but no man could number! Bureaus of statistics are established to investigate the causes that injuriously affect the laborer. But the General Court has no ear for the husbandman, who complains that the very elements of subsistence are threatened, and that the question of producing food at all should have precedence of the minor inquiry:—How much shall be paid for its production?

The Harvest year which is just expiring has not been without one striking compensation for the Pomologist. He has enjoyed an almost complete exemption from that mysterious *Blight*, whose ravages have been so wide-spread and unsparing for many years past. To what natural cause shall we attribute this happy immunity? There has been the usual discharge of electricity; there have been heavy showers, and about the ordinary alternations of cloud and sunshine; although the period of what are termed Dog-Days was less oppressive and sultry than is customary. Yet, for the first year since he has been Secretary of this Society the writer has not lost even a twig. What stern experience he has had, you need not now to be informed. He learns, from a very general interrogation, that others, fellow-sufferers heretofore, were equally fortunate. Still no ray of light penetrates our ignorance. If of fungoid origin—as would appear to be the better opinion,—what produces it, or excites its virulence? The law provides for Inquests in the event of crime or death, whereby the dignity and peace of the Commonwealth are assailed. A deadly peril to one of its material interests attracts no attention;—cannot even aspire to a place among the Orders of the Day. The Grange agitates for more careful consideration of the interests of Husbandry. But its Representatives, after they have climbed Beacon Hill and got wonted to its Castle of Indolence, devote their time and study to the *menu* at Parker's. The writer can recollect no Report from the Committee on Agriculture, for the last Decade, suggesting aught but "leave to withdraw." No proposition emanating from an individual Member of the Legislature, bucolic or otherwise, has looked to the protection of the community, engaged in and dependent upon the cultivation of the soil, from damage by ravening birds, insects, or blighting disease. We tax ourselves to maintain a Police and Militia, to guard against a possible breach of the peace. Probably Massachusetts cannot afford the cost of an Entomol-

gist; electing in preference a system of largess to her unsalaried Commissions. It cannot be that a competent man is wanting;—since the Federal Government found one, at the instant, to investigate and report upon the Entomology of the Western Plains. Verily, "a prophet "is not without honor, save in his own country:" else, numbering Morse and Packard among her sons, our conceited and often pragmatic Commonwealth could easily find a suitable place wherein to put the right man.

"There is no royal road to learning," and there would appear to be no immunity from the primeval curse. Even the Horticulturists of California are beginning to realize that the earth will not forever yield spontaneously; and that the foes to be encountered in its cultivation, will not always confine themselves to the shores of the Atlantic. Says a writer, by the far Pacific:—"It cannot be denied that this is an off "year in fruit in California. We have been so long and so constantly "in the enjoyment of good, almost perfect fruit in this state, that we "are loth to admit that there can possibly be a change—even a tem-"porary one. Our apples have been growing wormy for a number of "years, and so have our pears; but this year the pest has gained "a stronger hold on those fruits than ever before. It has come upon "us out of all proportion; and, instead of taking a few of our apples "and pears, the worms have taken the many this year and left the few "to come to perfection. We trnst and hope that it may be owing to "the season, and that such wide-spread destruction will prove only "temporary." The apostle tells us that "faith is the substance of "things hoped for, the evidence of things not seen." Call it faith or *fiat*, whichsoever you prefer, but, all the same, in California or Massachusetts, man finds himself powerless to contend, unaided, with the myriads of his Insect-Foes.

Does anything remain unsaid of the losses to the Pomologist from the depredations of BIRDS? Who among you is not personally cognizant of them? Whether it be the early Peas of Paul Whitin; the Strawberries and Grapes of Henry Phelps and Frank Kinney; or the Raspberries and Pears of your Secretary and others, the beak of the TURDUS *migratorius* is ever open, omnipresent,—omnivorous. Nor is this a local, individual prejudice. PROFESSOR BEAL, of the Michigan Agricultural College, states that "One Sunday, at Adrian, Michigan, "in about eight hours, the robins took five hundred pounds of grapes." He says that "H. D. Adams, of Kalamazoo County, raises about one

"hundred and fifty bushels of Cherries, annually. One year the "birds came in such flocks that between fifty and a hundred bushels of "cherries were taken almost at once." He says "the idea of raising "enough for the birds is 'played out.' The most destructive of these "birds are the robin, (pseudonym for the TURDUS,) cat-bird, oriole, "and cedar-bird, the latter by far the most so. Judge Ramsdell, of "Traverse County, loses nearly all his cherries in this way, and he is "going to let his trees go down." And so—with even more emphasis,—from a cloud of witnesses throughout the Republic. But Legislative stolidity neither heeds nor cares, maintaining the safeguard of an uninterrupted close season, and rendering useless, through partial domestication, many species of birds that would be of admi ted service if relegated to their *fera natura.* Revive the timorousness, that should never have been allayed, by a generous use of the shot-gun during the summer months, and thus compel them to substitute the *Melolontha* for the berry and stone-fruit. With fewer of his exquisite strawberries in their beaks, our friend upon Sunnyside may reasonably expect a surfeit of that strident noise which he fondly mistakes for melody. Frightened from the Farmstead and Garden, there may be some hope of a return to be derived by those who have had wit and will to plant the Peach. It is not extermination of Frugivorous Birds that has been or is now advocated in these Reports. Rather the adoption or license of that old-time policy which, by thinning out their numbers for a season, kept alive their innate timidity and forced them to get their living according to the dictates of Nature. If the sentimentalist desires to convert his grounds into an aviary, no one will object. But let him keep his pets confined, or restrain them from injuring his neighbors. With a close quarantine, even the TURDUS may be spared.

The employment of *Gum Shellac* as a styptic in cases of the excision of limbs from trees, has long been approved. Many years ago when its price had become excessive, under the combined oppression of a prohibitory tariff and a depreciated currency—inevitable fruits of a Civil War—your Secretary advised the use of *Gas Tar* as a substitute. Quite lately, in reply to a query from a correspondent, the London (Eng.) *Garden* remarks that "Gas Tar put on the stems of trees would, "we fear, prove injurious to them." So our learned associate, the Editor of the *Gardener's Monthly*, referring to "most absurd notions," cites the following from the pen of MARSHALL P. WILDER, in the Massachusetts *Ploughman*: "In the Ploughman of May 4th, a writer

"signing himself J. L. B., states that he used coal tar on fruit trees to "protect them from the ravages of mice, by the recommendation of "Marshall P. Wilder, and thereby destroyed or injured his fruit trees. "I never gave such advice, nor should I have used tar of any kind "without first wrapping the tree in cloth or other material so that the "tar might not come in contact with the bark of the tree." A most eminent authority, indeed. Nevertheless your Secretary cannot doubt the results of twenty years' personal experiment, nor challenge the actual facts within his daily notice. He has applied Gas Tar, hot or cold, as came most handy, upon Cherry and Pear trees in his own garden, in every instance of pruning that seemed to require exclusion from atmospheric influence. No deleterious effect has ever followed. If fault could be found with his trees, it would be that their growth has been too thrifty. Their fruit has been exhibited occasionally, and reflected no discredit upon their mode of cultivation. The tar was invariably applied to the freshly-pared surface of both bark and wood. A callus would form in due time, such as never developed under different treatment. Occular demonstration of this truth may be had by any one who will trouble himself to inspect the Shade-Trees of the City of Worcester—notably on Elm Street, just above the house of Dr. Francis, which has strikingly recovered from the effects of a bad fracture. More attention has been bestowed upon this matter than its importance would seem to justify. But it is ever timely to vindicate the truth; and nothing but truth should appear in a Report that is issued under the sanction of this Society. Especially in times like these, when "every little makes a mickle," may time and space be spared for the advocacy of a cheap and sure agent, in lieu of one that is more costly and less efficient.

Our exemption from killing frosts, until so recent a date, deserves to be put on record. Until the night of the 29th ult., plants as tender as the Geranium remained unaffected by cold in one of the most exposed places in Worcester. The Tomato, and other sensitive vegetables matured their fruit without check or loss. Grapes have fully ripened, although that might have been said with truth three weeks since, of even the *Iona*, in an unusually sheltered and sunny position. The experience of this Autumn only confirms the opinion, formed after long observation, that by the use of some of that forethought and discretion which provides hay-caps in anticipation of summer showers, many plants and vegetables might have their existence prolonged for weeks

There are usually one or two nights of sharp frosts to warn us that the summer is at an end. Thereafter, were slight precautions taken, garden and grounds might be gay with the unimpaired radiance of Aster, Geranium and Salvia. And the fall of the leaf is sufficiently depressing, to demand for its counteraction every influence of nature or art that may cheer and enliven. The protection or shelter required has only to be timely; it need be but slight. The warmth of a fir-tree often matures the clusters upon a vine, which would have perished half-grown or unripe, upon the bleaker support of a trellis.

The terrific Frost, 30° Fahrenheit, of A. D. 1860–61, that preceded the War—fit usher of that and similar calamities—froze the very life out of Quince, Cherry and Peach trees. Their subsequent existence was rather a struggle for resurrection than recovery. Some were destroyed outright. Of others, the vitality was so far impaired that they had not sufficient stamina to rally, and therefore yielded readily to the first attacks of disease. Latterly the faith of persistent cultivators has been rewarded. The Cooledge, Old Mixon and Crawford appeared at the New England Fair, as for some years past upon our own tables, without taint of the *Yellows*. In too many specimens, however, that insidious disease betrayed unmistakable marks of its lurking corruption. But all experience goes to show that when sound, healthy trees are planted, there need be little fear of adverse climatic influences. Only once in a generation, possibly not so often, do the princes of the powers of the air combine to wage exterminating war upon Pomona.

The terms of eulogy were exhausted by reporters for the newspaper press, in their descriptions of the quality and profusion of the *Peaches* at the late New England Fair. Yet there were but forty-four (44) plates in all; and among them, a single variety—the Crawford—was largely predominant. But twenty-two (22) years previous, one hundred and thirteen plates of Peaches had been shown at a single, local Exhibition of the WORCESTER COUNTY HORTICULTURAL SOCIETY. And at that Exhibition two contributors displayed eleven (11) distinct varieties, while one exulted in the remarkable number of thirty (30). Truly our progress, since A. D. 1856, has not been in the line of either fecundity or novelty.

Apprehensions of a short crop of PEARS were early expressed and have been, in great measure, justified. Of some varieties, it is true, there was a profusion, notably that half-appreciated kind, the *Louise Bonne de Jersey*. Your Secretary is generally accredited with the

Washington on the brain. He never fails to have an ample yield of it upon his trees. Yet of many species there has been hardly a specimen; a default that was painfully apparent at the New England Fair, even if it was held too early. Whether we exact too much from our Pear trees, a deficient yield in one year off-setting the excess in that which preceded; or fail to replace with the right nutriment that primordial fertility which constant cultivation must needs exhaust; or exceed their limit of old age, to which trees are as subject as all other forms of animal or vegetable matter: in any event, and however viewed, we are furnished with food enough for reflection. It answers nothing to tell us of the exceeding long life of the Stuyvesant Pear-tree, or of those patriarchs which perhaps even now survive, in the Kaskaskia Bottom—a memorial of the French settlers. How much better were they than choke-pears, of no value to enjoy or perpetuate! What we have to determine for the future prospects of our Fruit Orchards is, whether with the extreme and forced developement of quality, as in all other high civilization, sin and death do not inevitably enter. Ordinarily, we exact or suffer enormous crops, year after year, for a life-time, possibly compensating this vital drain with a little stable manure, and then wonder that the same trees do not yield in continued and unimpaired abundance. We sometimes allow our fields to lie fallow: "root hog, or die!" coarsely paraphrases the injunction that we place upon our orchards. Upon the trees that did bear, in A. D. 1878, there were produced some noteworthy specimens. A Committee of this Society, eighteen years ago, constituted of such experts in Pyriculture as George Jaques, John Milton Earle, D. Waldo Lincoln, John C. Ripley and Jonathan Grout were moved to comment upon a "very remark-"able increase in weight—an average of two ounces apiece in twenty-"four specimens of as many varieties—chiefly to be attributed, no "doubt, to a very favorable season; still much also must be claimed "for a gradual improvement in the modes of cultivation, of which we "every year have new evidence."

That Committee noticed a specimen *Duchesse* that weighed thirteen and one-half ounces. What would they have said could they have seen the one grown this year, by our efficient Treasurer, which turned the scales at twenty-two and one-half ($22\frac{1}{2}$) ounces? or his ten that balanced twelve and one-half ($12\frac{1}{2}$) pounds! The same gentleman (Mr. Newton) has also exhibited twelve pears of the variety *Winter Nelis* that weighed five pounds, nine and three-fourths ounces; thus

surpassing by two pounds, the heaviest heretofore shown upon our tables. I am aware that these weights—of the *Duchesse* at least—are not to be compared with those of the ponderous specimens developed by the disciples of an Eclectic Pomology, in the vicinity of the State House, who with the fear of MARSHALL P. WILDER before their eyes, sit up o' nights, culling, trimming, and stimulating. But what would you have? As the rustic belle replied to her city-bred lover, who thought to depreciate the Harvest Moon,—"Yes, I know, but won't it do for the country?"

At the Annual Meeting of the TRUSTEES, November 7th, A. D. 1877, it was voted that "The Secretary be authorized to procure a Portrait "of the late Frederic William Paine, to be painted by Mr. J. S. Lin-"coln, of Providence, R. I., and to cause the same to be suspended in "the Library." That vote has been executed and the Portrait of Mr. Paine now hangs, in plain sight, from these walls. With what success the labors and singular faculty of the artist have been crowned, you can better judge, when you learn that a duplicate was ordered by the family after they had seen the painting achieved for us. You have been fortunate in the attempt to perpetuate his expressive features. You are more fortunate in the possession of this Estate—Real and Personal—a Trust for the common weal as it is, which his zeal and untiring devotion did so much to establish and conserve. That the place of our first Treasurer is so well filled now, may be accounted a piece of exceeding good luck. But no present happy chance can depreciate the value of Mr. Paine's services heretofore, or lessen the estimation in which his exemplary devotion to its best interests should ever be cherished by the WORCESTER COUNTY HORTICULTURAL SOCIETY. Should it be your will, atsuch inconsiderable expense, to continue the policy of perpetuating upon canvas the familiar lineaments of our worthies, to whom the established prosperity of this Society is mainly due, you cannot go amiss or need to go far. There is one benefactor, whose munificence equals, if it has not exceeded that of Mr. Waldo, and whose cordial co-operation was never, under any circumstances, withheld. Years since, when our debt had become oppressive, his generosity instigated and achieved measures that resulted in our substantial relief from the more onerous weight of the burden. His contributions to our Exhibitions are never lacking; constituting, both in amount and quality, a leading attraction, without which they would be sadly deficient. What need to mention the name of STEPHEN SALISBURY, to enable you to

comprehend whose portrait, in sequence, your Secretary advises you to procure. And to procure now,—in his lifetime—that he may know that we were not churlishly ungrateful for a liberality, the greatness of whose sum might only be measured by the graceful and unobtrusive manner of its manifestation.

This Report would be sadly imperfect were it void of allusion to the recent death of BENJAMIN FRANKLIN THOMAS, followed so soon by that of HENRY CHAPIN. In the catholicity of their tastes there was room for a rare enjoyment of Horticulture. In the manysidedness of their characters, whereof, in either, the Poet's phrase is thoroughly descriptive:

"totus, teres, atque rotundus."

The love of Nature was a transcendant passion. In early manhood, when ampler leisure permitted; as in their maturer years, after the cares of an engrossing profession left little time for recreation; they could always be found ready and willing to prepare a Report or deliver an address in your service. Nor was their zeal lacking in discretion; for few knew better whereof they discoursed. But two or three years have elapsed since the *St. Michel* pears of Judge Chapin were denied a premium, because of their extreme size; the Committee doubting their genuineness because they were so large! And, although the *Beurre Bosc* of Judge Thomas were never challenged, it was not because they lacked magnitude, or any essential to perfection, as his competitors had occasion to admit. Neither were these tastes out-lived; refined, if also in the best sense of the old Saxon idiom, homely. As private citizens, or Officers of State, they were not disdainful of the Annual *Cattle Show*, or the HORTICULTURAL EXHIBITION that originated later. The "Report on Fruits," of our own Society, discloses that "a fine "basket of *St. Michel* Pears was brought to the Fair by B. F. Thomas, Esq.," in A. D. 1841. And it is within the knowledge of your Secretary that his contributions were continuous and uninterrupted, until his departure from Worcester. At the very recent Fair of the *New England Agricultural Society* a lot of Fruit from Henry Chapin attracted especial notice, not so much from its quality, which was unimpeachable, as from the general surprise that one, in his condition of sore distress, should have even thought or cared to send it in.

Our Society can ill afford their loss. Shall their places remain vacant? Who will step forward to fill them?

"Homo sum; nihil humani
A me alienum puto."

Muster in your cavalry, if you will, and enroll your torch-bearers Nay, barbecue your beef, if you cannot stomach steaks after the Abysinian method! And yet life must, in the after years, have some higher aspiration than for a complete mastery of such politics as grind their grist for the silver-gambler or stock-jobber, or even dominate the sand-lot and sewer.

All which is respectfully submitted, by

EDWARD WINSLOW LINCOLN,
Secretary.

Horticultural Hall,
WORCESTER, MASSACHUSETTS,
Nov. 6, A. D. 1878.

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society:

In accordance with the custom of the Society, the Librarian herewith submits his Annual Report. He is happy to state that the Library has been more extensively used the past than the previous year. At the commencement of the year now just closed, the Librarian made an effort to obtain Horticultural and Agricultural Reports from the several states. He succeeded in obtaining Reports from a few, though from some he got no response, either by letter or books. The Secretaries of the Agricultural Boards or Horticultural Societies from eight States responded to his letters, either by letter or by forwarding the Reports desired, and forty-five volumes were received from the eight States, as will be seen by the report of the additions to the Library hereunto annexed.

The Library Committee as usual have purchased several valuable books which will appear in the list reported.

Through the kindness of our Secretary an excellent likeness of Hon Marshall P. Wilder, nicely framed, has been hung in the Library, and also the Centennial Diploma of the Secretary, handsomely framed. The Committee have also had the Society's Diplomas framed and hung in the Library.

The following comprise the books added to the Library the past year, by gift or purchase:

Semi-Tropical Magazine for 1877.

Report of Commissioner of Agriculture, 1874–1875 and 1876; from E. W. Lincoln.

Notes on Botrychium, simplex; Hitchcock; by George E. Davenport; Society.

The art of Grafting and Budding; by Chas. Baltet; Society.

Transactions of Massachusetts Horticultural Society; from E. W. Buswell, Treasurer.

Schedule of Prizes of Massachusetts Horticultural Society; from E. W. Buswell, Treasurer.

Ferns of North America; by Prof. Daniel C. Eaton of Yale College; Parts 1, 2, 3; Society.

Proceedings of the 5th Annual Meeting of the Illinois State Farmers Association; from W. C. Flagg, President.

Proceedings of the 5th Annual Session of the National Agricultural Congress; from W. C. Flagg, President.

Transactions of the Nebraska State Horticultural Society for 1877; from D. H. Wheeler, Secretary.

The Superficial Deposits of Nebraska; by Samuel Aughey, Ph. D.; from D. H. Wheeler, Secretary.

The State of Nebraska as a Home for Emigrants; from D. H. Wheeler, Secretary.

Report of the Fruit Growers Association of the Province of Ontario, for 1877; from D. W. Beadle, Secretary.

Transactions of the Massachusetts Horticultural Society; from Robert Manning, Secretary.

Agriculture of Maine, 1871; 1874–5; 1875–6; 1876–7; from C. L Flint; Secretary of the Massachusetts Board of Agriculture.

Agriculture of Maine, 1870–1872–1873–1876–1877–8; Samuel L Boardman, Secretary Board of Agriculture of Maine.

New Hampshire Agriculture, vol. 5, 1875; vol. 6, 1876; from Jas. O. Adams, Secretary of State Board, New Hampshire.

Ohio Agricultural Report, 1867–1870–1871–1872–1873–1874–1875–1876; from C. L. Flint, Secretary.

Report of Connecticut Board of Agriculture, 1866–1867–1872–1874–1875–1876; from C. L. Flint, Secretary.

Report of Connecticut Board of Agriculture, 1868–1871–1873–1877; from T. S Gold, Secretary of Connecticut State Board of Agriculture.

Transactions of Illinois Horticultural Society, vol. 10, 1876, vol. 11, 2 vols, 1877: from O. B. Galusha, Secretary State Horticultural Society.

Journal of Horticulture, vol. 33; conducted by G. W. Johnson, F. R. H. S., and Robert Hogg, LL. D.; Society.

Special Report Department of Agriculture, No. 6, 1878: from Frederic Watts, Commissioner of Agriculture.

Agriculture of Massachusetts, 1877–8: with index from 1853 to 1877; from C. L. Flint, Secretary State Board of Agriculture.

Curtis's Botanical Magazine; by J. D. Hooker; vol. 33; colored plates; 8vo; London. 1877; Society.

Florist and Pomologist; a pictorial monthly magazine of Flowers, Fruit and Horticulture; conducted by Thomas Moore, F. H. R. S.; 1878; large 8vo; colored plates; London (still publishing); bound; Society.

The Pinetum; being a synopsis of all the Coniferous Plants at present known, with descriptions, history and synonyms, and a comprehensive, systematic index; by George Gordon, A. L. S.; Society.

Floral Magazine; figures and descriptions of the choicest new Flowers for the Garden or Conservatory; by Richard Deane; new series; 1878; large 8vo.; 56 large colored plates; London; Society.

Suburban Home Grounds ; illustrated with upward of 200 plates and engravings ; Society.

Flore des Serres et des Jardins de l'Europe Annales Générales d'Horticulture ; L. Van Houtte, editor and publisher ; Tome 21 ; large 8vo ; many cuts and colored plates; Gand ; Belgique ; 1875 ; (still publishing); Society.

Synoptical Flora of North American Botany ; by Asa Gray, LL. D ; Society.

Bibliographical Index to North American Botany ; by Sereno Watson; Society.

Ferns in their Homes and Ours ; by John Robinson ; Society.

Ferns of Kentucky ; with 60 full page etchings and 6 wood cuts ; by John Williamson ; Society.

First Annual Report of the United States Entomological Commission for the year 1877 ; relating to the Rocky Mountain Locust with maps and illustrations ; from W. W. Rice, M. C.

Report of the Board of Commissioners on the Irrigation of San Joaquin, Tulare and Sacremento Valleys, of the State of California ; from W. W. Rice, M. C.

Native Flowers and Ferns of the United States ; from 1 to 12 inclusive ; by Thos Mehan ; Society.

Ferns of North America ; by Prof. Daniel C. Eaton of Yale College ; large 4to ; parts from 4 to 9 inclusive ; colored plates ; Society.

Notes on Trees and Tree Planting ; by C. S. Sargent ; from C. S. Sargent.

Country Gentleman, The ; vol. 43 ; 1878 ; Society.

Gardener's Chronicle, The ; 1878 ; folio ; Society.

American Agriculturist, The ; vol. 37 ; 1878 ; folio ; Society.

Agricultural Gazette, The ; 1878 ; London ; folio.

Gardener's Monthly, The ; vol. 20 ; 1878 ; 8vo.

Villa Gardener, The ; 1878 ; 8vo ; London.

Massachusetts Ploughman, The ; from George H. Noyes, proprietor and publisher ; 1878.

Transactions Department of Agriculture, Illinois ; vol. 8, 1869–70 ; vol. 10, 1872 ; vol. 11, 1873 ; vol. 12, 1874 ; vol. 13, 1875 ; vol. 14, 1876 ; from S. D. Fisher, Secretary Illinois State Board of Agriculture.

All of which is respectfully submitted.

JOHN C. NEWTON,
Librarian.

HALL OF FLORA,
November 6th, 1878.

ERRATA:

On page 34,—21st line from the top, for coquate, read cognate.

On page 37,—16th line from top, for *Azalia*, read *Aralia*.

On page 39,—22d line from top, for polite, read politic.

OFFICERS AND COMMITTEES

OF THE

Worcester County Horticultural Society,

FOR THE YEAR 1879.

PRESIDENT:

WILLIAM T. MERRIFIELD, of Worcester.

VICE PRESIDENTS:

STEPHEN SALISBURY, of Worcester; PHILIP L. MOEN, of Worcester; O. B. HADWEN, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

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Horatio Phelps,	"	Calvin L. Hartshorn,	"
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Aug. N. Currier,	"		

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ON NOMENCLATURE:

James F. Allen, Henry Phelps, George E. Francis.

ON ARRANGEMENTS AND EXHIBITIONS:

J. C. Newton, *Chairman.* Samuel Flagg, William H. Earle,
George E. Francis, Geo. Cruickshanks, William T. Merrifield, *Pres.*
Henry L. Parker, Henry Phelps. Edward W. Lincoln, *Sec'y.*

Nos. 5 Oak and 18 Front Sts.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1878-9.

☞ The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

WORCESTER, MASS.:
PRINTED BY EDWARD R. FISKE, 10 FOSTER STREET.
1878.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

JOHN C. NEWTON, *Chairman.*
GEORGE E. FRANCIS,
SAMUEL FLAGG,
GEORGE CRUICKSHANKS,
HENRY PHELPS,
WILLIAM H. EARLE,
HENRY L. PARKER.

WILLIAM T. MERRIFIELD, *President.*
EDWARD W. LINCOLN, *Secretary,*
Nos. 5 Oak and 18 Front Streets, Worcester

FRUITS AND VEGETABLES.—HENRY PHELPS, *Chairman;* James F. Allen, Joseph Lovell, George Cruickshanks, John C. Newton.

FLOWERS, PLANTS, &c.—GEORGE CRUICKSHANKS, *Chairman;* Edward W. Lincoln, William W. Cook, Mrs. Thomas L. Nelson, Stephen Salisbury, Jr.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premiums must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small Fruits* must be entered in quart boxes or baskets, but may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

RULES AND REGULATIONS.

1. Articles offered for premium must be in the Hall before two (2) o'clock, P. M., of the days of the Exhibitions.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premiums shall have been grown by the competitors, *within the County of Worcester.*

3. After the articles are arranged they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove* them until the Exhibition is closed, when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits, or Vegetables, is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Committees to *exclude from exhibition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste.

7. The Committees have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary, by giving seasonable notice thereof.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc, will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables under different names; or exhibiting, as grown by himself, Fruit and Vegetables grown by another, thereby violating the objects and rules of the Society; shall be debarred from competing for the Society's premiums until re-instated.

9. No Flowers, Plants, Fruits, or Vegetables, will be entitled to a premium unless they possess points of superiority; and the Committees are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them: nor shall any specimen for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

11. No member of any of the Committees for awarding premiums or gratuities shall, in any case, vote or decide respecting an award for which such member may be a competitor, or therein have an interest; but in such case such member shall temporarily vacate his place upon the Committee, the vacancy for the time being to be supplied by the remaining members of the Committee.

12. All premiums that are not claimed within three months after the close of the official year shall be forfeited to the Society.

13. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

14. "Downing's Fruits of America," revised edition, will guide the Committees in their decisions upon matters at issue.

☞ The *Chairmen* of Committees are authorized, by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

FRUITS AND VEGETABLES.

1878-9.

THURSDAY, DECEMBER 5, 1878.

APPLES.—

For the best ten Hubbardston Nonesuch, three premiums..... 1.50, 1, .50
For the best ten R. I. Greenings, three premiums.... 1.50, 1, .50
For the best ten of any other variety..... 1.00.

PEARS.—

For the best ten Beurre d' Anjou, three premiums....$1.50, $1, .50
For the best ten Beurre Diel, three premiums,..... . 1.50, 1, .50
For best ten of any other variety... ..... 1.00.

THURSDAY, DECEMBER 12.

APPLES.—

For the best ten of any named variety, three premiums, 1.50 1, .50

PEARS.—

For the best ten of any named variety, three premiums, $1.50 $1, .50

THURSDAY, DECEMBER 19.

APPLES.—

For the best ten Baldwins, three premiums..... 1.50, 1, .50
For the best ten Leicester Winter Sweet, three premiums ..... 1.50, 1, .50
For the best ten of any other variety..... ..... 1.50.

PEARS.—

For the best ten Lawrence, three premiums.....$1.50 $1, .50
For the best ten Winter Nelis, three premiums..... 1.50, 1, .50
For the best ten of any other named variety..... 1.00.

THURSDAY, DECEMBER 26.

APPLES.—

For the best ten of any named variety, three premiums, 1.50, 1, .50

PEARS.—

For the best ten of any named variety, three premiums, $1.50, $1, .50

THURSDAY, JANUARY 2, 1879.

APPLES.—

For the best ten Tompkins King, three premiums.... 1.50, 1, .50
For the best ten Mother, three premiums..... .... 1.50, 1, .50
For the best ten of any other variety..... 1.00

PEARS.—

For the best ten Vicar of Winkfield, three premiums..$1.50, $1, .50
For the best ten of any other variety..... 1.00

THURSDAY, JANUARY 9.

APPLES.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, JANUARY 16.

APPLES.—

For the best ten Northern Spy, three premiums..... 1.50, 1, .50
For the best ten Cogswell, three premiums..... 1.50, 1, .50
For the best ten of any other variety..... 1.00

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, JANUARY 23.

APPLES.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, JANUARY 30.

APPLES.—

For the best ten Peck's Pleasant, three premiums.... 1.50, 1, .50
For the best ten McClellan, three premiums..... 1.50, 1, .50
For the best ten of any other variety..... 1.00

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, FEBRUARY 6.

APPLES.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

THURSDAY, FEBRUARY 13.

APPLES.—

For the best ten Washington Royal, three premiums.. 1.50, 1, .50
For the best ten Sutton Beauty, three premiums..... 1.50, 1, .50
For the best ten of any other variety, three premiums. 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, FEBRUARY 20.

APPLES.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, FEBRUARY 27.

APPLES.—

For the best ten Golden Russet, three premiums..... 1.50, 1, .50
For the best ten Yellow Bellflower, three premiums.. 1.50, 1, .50
For the best ten of any other variety 1.00

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, MARCH 6.

APPLES.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, MARCH 13.

APPLES.—

For the best ten Roxbury Russet, three premiums.... 1.50, 1. .50
For the best ten of any other variety, three premiums. 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, MARCH 20.

APPLES.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, MARCH 27.

APPLES.—

For the best ten of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten of any variety, three premiums.....$1.50, $1, .50

THURSDAY, APRIL 3.

For the best Fruit of any sort, three premiums.... ...$1.50, $1, .50

VEGETABLES.—

For the best pair of Cucumbers, two premiums.....$1, .50
For the best four heads of Lettuce, two premiums ..... 1, .50

THURSDAY, APRIL 10.

RADISHES.—

For the best four bunches, two premiums.....$1, .50
For the best Vegetable of any other variety..... 1

THURSDAY, APRIL 17.

For the best ten stalks of Rhubarb, two premiums.....$1, .50
For the best ten Vegetables of any variety..... 1

THURSDAY, APRIL 24.

For the best Vegetables, three premiums..... $1.50, $1, .50
For the best Fruit of any variety, two premiums... .. 1.50, 1

THURSDAY, MAY 1.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

THURSDAY, MAY 8.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

THURSDAY, MAY 15.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

THURSDAY, MAY 22.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

THURSDAY, MAY 29.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

THURSDAY, JUNE 5.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

THURSDAY, JUNE 12.

ASPARAGUS.—

For the best three bunches of Asparagus, ten stalks each, three premiums ..... $1.50, $1, .50

Gratuities for other Vegetables.

THURSDAY, JUNE 19.

STRAWBERRIES.—

For the best quart of Strawberries, three premiums... $1.50, 1, .50

BEETS.—

For the best early Beets, ten specimens, two premiums..... 1, .50

Gratuities for other Vegetables.

THURSDAY, JUNE 26.

STRAWBERRIES.—

For the best quart of Downer's Prolific, three premiums, $1.50, $1, .50
For the best quart of Durand's Pioneer, three premiums, 1.50, 1, .50
For the best quart of Wilson, three premiums..... 1.50, 1, .50
For the best quart of Charles Downing, three premiums, 1.50, 1, .50
For the best quart of any other varieties, three premiums 1.50, 1, .05
Gratuities for the best Vegetables.

THURSDAY, JULY 3.

STRAWBERRIES.—

For the best quart of Monarch of the West, three premiums ..... $1.50, $1, .50
For the best quart of Colonel Cheney, three premiums, 1.50, 1, .50
For the best quart of Jucunda, three premiums..... 1.50, 1, .50
For the best quart of Triomphe de Gand, three premiums ..... 1.50, 1, .50
For the best quart of Great American, three premiums, 1.50, 1, .50
For the best quart of Durand's Beauty, three premiums, 1.50, 1, .50
For the best quart of Crescent Seedling, three premiums, 1.50, 1, .50
For the best quart of Sharpless, three premiums..... 1.50, 1, .50
For the best quart of any other variety, two premiums, 1, .50
For the best fifty berries of one variety, three premiums..... $2.00, 1.50, 1.00

PEAS.—

For the best peck..... 1.00

THURSDAY, JULY 10.

CURRANTS.—

For the best two quarts Red Currants, three premiums, $1.50, $1, .50
For the best two quarts White Currants, three premiums,..... 1.50, 1, .50

CHERRIES.—

For the best two quarts Cherries, any variety, three premiums..... 1.50, 1, .50

STRAWBERRIES.—

For the best two quarts Strawberries, any variety, three premiums ..... 1.50, 1, .50

BEANS.—

For the best peck of Snap Beans, two premiums..... 1, .50

THURSDAY, JULY 10—Continued.

PEAS.—

For the best peck of Peas, of any variety, two premiums, 1, .50

TOMATOES.—

For the best twelve specimens of Tomatoes, two premiums..... 1, .50

THURSDAY, JULY 17.

CURRANTS.—

For the best two quarts of La Versaillaise, three premiums.....$1.50, $1, .50
For the best two quarts of Red Dutch, three premiums, 1.50, 1, .50
For the best two quarts of White Grape, three premiums..... 1.50, 1, .50
For the best two quarts of White Gondouin, three premiums..... 1.50, 1, .50
For the best two quarts of any other variety, three premiums..... 1.50, 1, .50

STRAWBERRIES.—

For the best two quarts of Strawberries, of any variety, three premiums..... 1.50, 1, .50

RASPBERRIES.—

For the best two quarts of Brinckle's Orange, three premiums..... 1.50, 1, .50
For the best two quarts of Northumberland, three premiums..... 1.50, 1, .50
For the best two quarts of Hudson River Antwerp, three premiums..... 1.50, 1, .50
For the best two quarts of Clarke, three premiums.... 1.50, 1, .50
For the best two quarts of Franconia, three premiums, 1.50, 1, .50
For the best two quarts of Hornet, three premiums.... 1.50, 1, .50
For the best two quarts of Knevett's Giant, three premiums..... 1.50, 1, .50
For the best two quarts of Herstine, three premiums.. 1.50, 1, .50
For the best two quarts of any other variety, two premiums..... 1, .50

THURSDAY, JULY 17—Continued.

BLACKCAPS.—

For the best two quarts of Davison's Thornless, three premiums ..... 1.50, 1, .50
For the best two quarts of Doolittle, three premiums.. 1.50, 1, .50
For the best two quarts of Mammoth Cluster, three premiums ..... 1.50, 1, .50

PEAS.—

For the best peck of peas..... 1

POTATOES.—

For the best peck, two premiums..... 1, .50

THURSDAY, JULY 24.

RASPBERRIES.—

For the best two quarts of any variety, three premiums, $1.50, $1, .50

BLACKBERRIES.—

For the best two quarts of Kittatinny, three premiums, 1.50, 1, .50
For the best two quarts of Wachusett, three premiums, 1.50, 1, .50
For the best two quarts of any variety, three premiums 1.50, 1, .50

VEGETABLES.—

For the best ten ears of Sweet Corn, two premiums..... 1, .50
For the best four Squashes, two premiums..... 1, .50
For the best four Cabbages, two premiums..... 1, .50

THURSDAY, JULY 31.

PEARS.—

For the best ten specimens of Pears, of any variety, three premiums..... ...$1.50, $1, .50

TOMATOES.—

For the best ten specimens of Tomatoes, of any variety, three premiums..... ..... 1.50, 1, .50

THURSDAY, AUGUST 7.

APPLES.—

For the best ten specimens of Apples, of any variety, three premiums..... 1.50, 1, .50

PEARS.—

For the best ten specimens of Pears, of any variety, three specimens..... ..... 1.50, 1, .50

THURSDAY, AUGUST 14.

APPLES.—

For the best ten specimens of Apples, of any variety, three premiums..... .....$1.50, $1, .50

PEARS.—

For the best ten specimens of Pears, of any variety, three premiums..... ..... 1.50, 1, .50

CORN.—

For the best ten ears of Corn, three premiums..... 1.50, 1, .50

THURSDAY, AUGUST 21.

APPLES.—

For the best ten specimens of Apples, of any variety, three premiums.....$1.50, $1, .50

PEARS.—

For the best ten specimens of Pears, of any variety, three premiums.... ..... 1.50, 1, .50

POTATOES.—

For the best peck of Potatoes, two premiums..... 1, .50

THURSDAY, AUGUST 28.

APPLES.—

For the best ten specimens of Apples, of any variety, three premiums..... $1.50, $1, .50

PEARS.—

For the best ten specimens of Pears, of any variety, three premiums..... 1.50, 1, .50

PEACHES.—

For the best ten specimens of Peaches, of any variety, three premiums..... 1.50, 1, .50

THURSDAY, SEPTEMBER 4.

APPLES.—

For the best ten specimens of Apples, of any variety, two premiums..... 1.00, .50

A Gratuity will be given for the best collection of Plums.

PEARS.—

For the best ten specimens of Clapp's Favorite, two premiums.....$1.50, $1.00

For the best ten specimens of any other variety, two premiums..... 1.00, .50

PEACHES.—

For the best ten specimens of Peaches, of any variety, two premiums..... 1.00, .50

THURSDAY, SEPTEMBER 11.

APPLES.—

For the best ten specimens of Red Astrachan, two premiums ..... $1.00, $ .50
For the best ten specimens of Early Williams, two premiums ..... 1.00, .50
For the best ten specimens of Early Sweet Bough, two premiums ..... 1.00, .50
For the best ten specimens of Duchess of Oldenburg, two premiums ..... 1.00, .50
For the best twenty-four specimens of Crab Apples, two premiums ..... 1.00, .50

A Gratuity will be given for the best collection of Plums.

PEARS.—

For the best ten specimens of Belle Lucrative, two premiums ..... 1.00, .50
For the best ten specimens of Bartlett, two premiums ..... 1.00, .50
For the best ten specimens of Clapp's Favorite, two premiums ..... 1.00, .50
For the best ten specimens of any other variety, two premiums ..... 1.00, .50

PEACHES.—

For the best ten specimens of Peaches, of any variety, two premiums ..... 1.00 .50

VEGETABLES.—

For the best four varieties of Vegetables, two premiums, 2.00, 1.00

THURSDAY, SEPTEMBER 18.

APPLES.—

For the best ten specimens of Foundling, two premiums, 1.00, .50
For the best ten specimens of Golden Sweet, two premiums ..... 1.00, .50
For the best ten specimens of Gravenstein, two premiums ..... 1.00, .50
For the best ten specimens of Porter, two premiums ..... 1.00, .50

THURSDAY, SEPTEMBER 18—Continued.

PEARS.—

For the best ten specimens of Flemish Beauty, two premiums ..... 1.00, .50
For the best ten specimens of Paradis d'Automne, two premiums ..... 1.00, .50
For the best ten specimens of Washington, two premiums ..... 1 00, .50
For the best ten specimens of Bartlett, two premiums.. 1.00, .50

PEACHES.—

For the best ten specimens of Peaches, two premiums... 1.00, .50

GRAPES.—

For the best three clusters Hartford, two premiums.... 1.50, .50
For the best three clusters of Worden, two premiums... 1.00, .50
For the best two clusters of Hot-House Grapes, three premiums.....$3.00, 2.00, 1.00

PEACHES.—

For the best ten Early Crawford, two premiums..... 1.00, .50
For the best ten of any other variety, two premiums.... 1.00, .50

THURSDAY, SEPTEMBER 25.

APPLES.—

For the best ten specimens of Holden Pippin, two premiums .....$1.00, $ .50
For the best ten specimens of Lyscom, two premiums... 1.00, .50
For the best ten specimens of Twenty Ounce, two premiums ..... 1.00, .50

PEARS.—

For the best ten specimens of Doyenné Boussoc, two premiums ..... 1.00, .50
For the best ten specimens of Louise Bonne de Jersey, two premiums ..... 1.00, .50
For the best ten specimens of Seckel, two premiums.... 1.00, .50.

THURSDAY, SEPTEMBER 25—Continued.

GRAPES.—

For the best three clusters of Concord, two premiums...	1.00,	.50
For the best three clusters of Agawam, two premiums..	1.00,	.50
For the best three clusters of Delaware, two premiums..	1.00,	.50

PEACHES.—

For the best ten specimens of any variety, two premiums,	1.00,	.50

VEGETABLES.—

For the best four varieties, two premiums.....	1.50,	1.00

THURSDAY, OCTOBER 2.

APPLES.—

For the best ten specimens of Maiden's Blush, two premiums.....	$1.00,	$ .50
For the best ten specimens of Washington Strawberrry, two premiums.....	1.00,	.50
For the best ten specimens of any other variety, two premiums.....	1.00,	.50

PEARS.—

For the best ten specimens of Beurre Bosc, two premiums	1.00,	.50
For the best ten specimens of Beurre Clairgeau, two premiums	1.00,	.50
For the best ten specimens of Sheldon, two premiums..	1.00,	.50
For the best ten specimens of Doyenné du Comice, two premiums	1.00,	.50
For the best ten specimens of any other variety, two premiums.....	1.00,	.50

GRAPES.—

For the best three clusters of Salem, two premiums.....	1.00,	.50
For the best three clusters of Brighton, two premiums..	1.00,	.50
For the best three clusters of Martha, two premiums....	1.00,	.50
For the best three varieties, two clusters each, of Foreign Grapes, three premiums.....	$3.00, 2.00,	1.00

VEGETABLES.—

For the best four varieties, two premiums.....	1.50,	1.00

THURSDAY, OCTOBER 9.

APPLES.—

For the best ten specimens of any variety, two premiums, 1.00, .50

PEARS.—

For the best ten specimens of Beurre Hardy, two premiums ..... 1.00, .50
For the best ten specimens of Dix, two premiums..... 1.00, .50
For the best ten specimens of Duchesse, two premiums. 1.00, .50
For the best ten specimens of Durandeau, two premiums, 1.00, .50
For the best ten specimens of Onondaga, two premiums, 1.00, .50

GRAPES.—

For the best three clusters of any variety, two premiums 1.50, .50

THURSDAY, OCTOBER 16.

APPLES.—

For the best ten specimens of Mother, two premiums.. $1.00, $ .50
For the best ten specimens of McClellan, two premiums ..... 1.00, .50
For the best ten specimens of Sutton Beauty, two premiums ..... 1.00, .50
For the best ten specimens of Baldwin, two premiums.. 1.00, .50

PEARS.—

For the best ten specimens of Beurre d'Anjou, two premiums..... 1.00, .50
For the best ten specimens of Beurre Diel, two premiums..... 1.00, .50
For the best ten specimens of Goodale, two premiums.. 1.00, .50
For the best ten specimens of Howell, two premiums... 1.00, .50

VEGETABLES.—

For the best four varieties, two premiums..... 1.50, .50

THURSDAY, OCTOBER 23.

APPLES.—

For the best ten specimens of any variety, three premiums.....$1.50, $1.00, $ .50

PEARS.—

For the best ten specimens of any variety, three premiums..... 1.50, 1.00, .50

QUINCES.—

For the best ten specimens of any variety, three premiums..... 1.50, 1.00, .50

THURSDAY, OCTOBER 30.

APPLES.—

For the best collection, three premiums.....$3.00, $2.00, $1.00

PEARS.—

For the best collection, three premiums..... 3.00, 2.00, 1.00

VEGETABLES.—

For the best collection, two premiums..... 2.00, 1.00

THURSDAY, NOVEMBER 6.

APPLES.—

For the best collection, three premiums.....$3.00, $2.00, $1.00

PEARS.—

For the best collection, three premiums..... 3.00, 2.00, 1.00

VEGETABLES.—

For the best collection, two premiums..... 2.00, 1.00

THURSDAY, NOVEMBER 13.

APPLES.—

For the best collection, three premiums..... .....$3.00, $2.00, $1.00

PEARS.—

For the best collection, three premiums..... 3.00, 2.00, 1.00

VEGETABLES.—

For the best collection, two premiums..... 2.00, 1.00

THURSDAY, NOVEMBER 20.

APPLES.—

For the best collection, three premiums.....$3.00, $2.00, $1.00

PEARS.—

For the best collection, three premiums..... 3.00, 2.00, 1.00

VEGETABLES.—

For the best collection, two premiums..... 2.00, 1.00

THURSDAY, NOVEMBER 27.

APPLES.—

For the best collection, three premiums.... .....$3.00, $2.00, $1.00

PEARS.—

For the best collection, three premiums..... 3.00, 2.00, 1.00

VEGETABLES.—

For the best collection, two premiums..... 2.00, 1.00

FLOWERS, PLANTS, &c.

1879.

THURSDAY, MARCH 6.

PRIMULA SINENSIS.—

For the best three in bloom, two premiums.....$	$2.00,	$1.00
For the best single plant in bloom, two premiums,	1.00,	.50

HYACINTHS.—

For the best three in bloom, two premiums..... .	2.00,	1.00
For the best single plant in bloom, two premiums.	1.00,	.50

THURSDAY, MARCH 20.

AZALEA INDICA.—

For the best three plants in bloom, two premiums,	$3.00,	$2.00
For the best single plant in bloom, two premiums.	1.00,	.50

CYCLAMENS.—

For the best three in bloom, two premiums.....	2.00,	1.00
For the best single plant in bloom, two premiums.	1.00,	.50

THURSDAY, APRIL 17.

GREENHOUSE PLANTS.—

For the best three in bloom, two premiums.....	$3.00,	$2.00
For the best single plant in bloom, two premiums.	2.00,	1.00

THURSDAY, MAY 15.

FERNERIES.—

Which have been planted and growing at least two months, four premiums..... .....$5.00, $3.00, $2.00, $1.00

PANSIES.—

For the best display, three premiums.... ..... 3.00, 2.00, 1.00

THURSDAY, JUNE 5.

CUT FLOWERS.—

For the best display, open culture, three premiums,$3.00, $2.00, $1.00

NATIVE PLANTS AND FLOWERS.—

For the best display, three premiums..... 3.00, 2.00, 1.00

RHODODENDRONS.—

For the best display, two premiums..... 3 00, 2.00, 1.00

THURSDAY, JUNE 19.

ROSES.—

For the best twelve blooms or clusters of distinct named varieties of H. P. Roses, out-door culture, two premiums..... $3.00, $2.00

For the best six blooms or clusters of distinct named varieties of H. P. Roses, out-door culture, two premiums..... 2.00, 1.00

For the best six distinct varieties of tender Roses, three blooms or clusters of each, two premiums 3.00, 2.00

For the best display of Moss Roses, two premiums, 2.00, 1.00

CUT FLOWERS.—

For the best Stand, two premiums..... 2.00, 1.00

For the best Basket or Dish, two premiums..... 2.00, 1.00

For the best Parlor Bouquet, two premiums..... 2.00, 1.00

THURSDAY, JULY 3.

CUT FLOWERS.—

For the best Hand Bouquet, two premiums..... $2.00, $1,00

TABLE DESIGN.—

For the best, other than Basket, three premiums, 3.00, 2.00, 1.00

THURSDAY, JULY 10.

BASKET DESIGN.—

For the best, three premiums.. ... .$3.00, $2.00, $1.00

THURSDAY, JULY 17.

HOLLYHOCKS.—

For the best six distinct, two premiums..... $2.00, $1.00

TABLE DESIGN.—

For the best, two premiums..... ... 2.00, 1.00

THURSDAY, JULY 24.

GREENHOUSE FLOWERS.—

For the best twenty blooms or clusters, named varieties, from Greenhouse or open ground, three premiums $3.00, $2.00, $1.00

THURSDAY, JULY 31.

FLOWERS RAISED FROM SEED.—

For the best collections of named varieties, not less than twenty, two premiums $2.00, $1.00

For the best Basket of named varieties, not less than twenty, two premiums..... 2.00, 1.00

THURSDAY, AUGUST 7.

GLADIOLUS.—

For the best ten distinct spikes, two premiums.... $2.00, $1.00
For the best Parlor Bouquet, two premiums..... 2.00, 1.00

THURSDAY, AUGUST 14.

PERRENNIAL PHLOXES.—

For the best display, two premiums..... $2.00, $1.00

PETUNIAS.—

For the best display, two premiums..... 2.00, 1.00

CUT FLOWERS.—

For the best twenty blooms or clusters of distinct named varieties, not including Phloxes or Petunias, two premiums..... 2.00, 1.00

THURSDAY, AUGUST 21.

GLADIOLUS.—

For the best twenty distinct spikes, three premiums.... .....$3.00, $2.00, $1.00

CUT FLOWERS.—

For the best collection raised from seed, two premiums..... 2.00, 1.00

THURSDAY, AUGUST 28.

ASTERS.—

For the best twenty four, at least eight varieties, two premiums..... $2.00, $1.00
For the best twenty-four bottles Pompon Asters, three flowers in a bottle, at least eight varieties, two premiums.... ..... 2.00, 1.00

THURSDAY, AUGUST 28—Continued.

NATIVE FLOWERS AND PLANTS.—

For the best collection, two premiums..... $2.00, 1.00

THURSDAY, SEPTEMBER 11.

VERBENAS.—

For the best display, two premiums..... $2.00, $1.00

TABLE DESIGN.—

For the best, other than Basket, two premiums... 3.00, 2.00

THURSDAY, SEPTEMBER 18.

BASKET.—

For the best, two premiums..... ..... $3.00, $2.00

THURSDAY, SEPTEMBER 25.

PANSIES.—

For the best display, three premiums.....$3.00, $2.00, $1.00

THURSDAY, OCTOBER 2.

FLOWERS.—

For the best twenty blooms or clusters of distinct varieties, three premiums.....$3.00, $2.00, $1.00

THURSDAY, OCTOBER 9.

TABLE DESIGN.—

For the best, other than Basket, two premiums.... $3.00, $2.00

THURSDAY, OCTOBER 16.

FLOWERS.—

For the best collection of single blooms or clusters, distinct varieties, two premiums..... $3.00, $2.00

THURSDAY, OCTOBER 23.

BASKET OR DISH.—

For the best, three premiums.....$3.00, $2.00, $1.00

THURSDAY, OCTOBER 30.

PARLOR BOUQUET.—

For the best, two premiums..... $3.00, $2.00

PANSIES.—

For the best display, two premiums..... $2.00, $1.00

TRANSACTIONS

OF THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1879

COMPRISING OUTLINES OF FOUR LECTURES

ON SOME RELATIONS OF BOTANY TO HORTICULTURE,

BY PROF. GEORGE L. GOODALE:

ALSO, THE

ANNUAL REPORTS OF THE LIBRARIAN AND OF THE SECRETARY.

WORCESTER, MASS.
SNOW, WOODMAN AND CO., PRINTERS,
(Successors to Noyes, Snow & Co.)
1880.

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OUTLINES OF A COURSE OF FOUR LECTURES

ON SOME RELATIONS OF

BOTANY TO HORTICULTURE.

Delivered by Prof. George L. Goodale, of the University at Cambridge, before the Worcester County Horticultural Society, A. D., 1879.

It is the task of Botany to answer every question which we can ask respecting plants. Horticulture deals with the very practical matters of originating, improving, and perpetuating garden plants. Therefore the questions which belong to gardening belong also to a department of applied Botany, and for a rational solution of the problems in Horticulture, we must look to the principles of Scientific Botany. The structure, food, growth, reproduction and diseases of plants occupy a wide field of research, from which the horticulturist, if he would be successful, must select rules for his guidance. For the purpose of these lectures the field can be merely glanced at, and not carefully surveyed ; all that can be done is to ascertain accurately a few of the more important points, and learn their relations to minor details.

The first groups of topics relate to the seed, its germination, and the development of the plant up to the period of its flowering. The second will treat of the production of seed, and the

perpetuation of the species. Lastly, must be considered the improvement of varieties and the obtaining of new and desirable sorts. This last can be made plainer by a brief study of the history of some of the more useful garden plants, and of the methods by which new varieties have been originated. This course of lectures will treat only of flowering plants; that is, of the plants which produce seeds having germs, and therefore the subject of the flowerless plants, like mosses, moulds, and ferns, will be left untouched.

I. From Seed to Flower.

A seed consists of a germ, or embryo plant, provided with a sufficient store of food, and having integuments for its protection. The germ foreshadows the future plant, and usually possesses, ready formed, a minute stem tipped with a root and seed leaves, between which is held a bud. All these parts are rudimentary, often existing as the merest hints of what can grow from them. Nevertheless, the germ can be subjected to serious mutilation without utterly destroying it. Extended experiments have shown that the embryo possesses a remarkable power of repair. (These experiments upon the ability of seeds of different plants to resist injury were described in detail, and the following conditions of germination were discussed, chiefly with reference to the planting and care of garden seeds.) The conditions of germination are moisture, warmth, and oxygen. The conditions which depend upon the seed itself, and which may rather be called requisites to speedy and healthful germination, are 1st, a proper degree of ripeness; 2d, freshness; 3d, soundness. (The practical bearings of these questions upon the length of time during which seeds remain suitable for use, and upon other practical topics, were stated at considerable length.)* If any of the more common garden seedlings are compared at different stages of their growth, they will be found to be made up of roots, stem, leaves, and a few delicate plant-hairs. "Now these are all the parts that any flowering plant ever has; the thorns and tendrils, and showy

* Part of the phraseology of the outlines here given has been taken from Dr. Goodale's work, "Concerning a Few Common Plants."

leaves and blossoms, and all the parts of every blossom, are only modified forms of one or more of the four parts or members just spoken of. This is the statement, made abruptly and in few words, of the accepted theory of plant structure." In a seedling, how many times are parts which are made up of a *joint of stem and a green leaf, or a pair of them*, repeated? In one seedling, there will be found six or more of these repeated parts; in another, only two or three, in another, perhaps only one besides that previously existing as the germ itself. The "repeated parts" differ greatly in their shape and size, and also in their kinds of work.

"Now these 'repeated parts' are *helping parts* or *helpful parts*. These parts are mutually helpful: they help one another. The whole plant is made up of just such parts, which have taken different forms for different kinds of work; as, for instance, in the leaves of the pea.

The seedlings of garden plants show these helpful parts, arranged in regular order. From the lowest of the helpful parts of the bean, the root started; but, in the Indian Corn, roots have started off also higher up. Again, they have plant-hairs in different places. Upon the youngest rootlets of the wheat or corn planted on wet paper, the hairs are very abundant; and there are some hairs scattered on the leaves of the bean. These roots and the hairs are to be examined later.

The succession of the helpful parts will be noticed best in slips of the common plants, "Wandering Jew," or Tradescantia, Heliotrope, and Bouvardia. In the case of the Tradescantia, the growth of a slip or cutting in moist sand, or with the lower end in water, is very instructive: roots grow from the lowest of the helpful parts, and furnish the food needed in solution, new leaves expand above to get food, as we shall see, from the air; and thus a separate, self-supporting colony is established. A flowering plant is a community from which many such colonies might be removed.

Next, arises the question: Where do these helpful parts come from? Of course, from buds. A bud is the promise of a branch. The application of this to the case in hand will force the conclusion that, since whatever springs from a bud is some sort of a branch, a developed flower from a flower-bud must be a branch too. And so it is. The helpful parts are here arranged in a very regular manner, and many of them are greatly changed in form and in work. From this subject, to be examined fully

in another place, we pass naturally to the development of buds underground. A leaf-bud — that is, an incipient stem — develops by lengthening the distance between the successive leaves. Under ground, in firm soil, such buds develop at great disadvantage; and the stems soon become more or less distorted; the degree of distortion depending somewhat upon the character of the soil in which growth takes place. The extremes are to be found in Beach Bind-grass (*Calamagrostis arenaria*), which has long internodes or joints of stem, and such plants as *Iris*, or Blue Flag, and Solomon's Seal. In not a few cases, the growth of the underground stem gives rise to very curious forms, which may be puzzling at first; for instance, the solid bulb or corm of crocus, and the thickened tip of the underground branch of potato, namely, the tuber itself. The "eyes" of the potato are merely disguised buds which have a good stock of food behind them. Potato-planting is colonizing, in which the tubers are the colonies separated from the home community. A very bad kind of such colonizing takes place when the underground stems of Witch-grass (*Triticum repens*) are only broken off, but not taken out of the soil, in hoeing the ground. The helpful parts are detached from each other, and each fragment serves as a starting point for a new plant. In grafting or budding, one or more groups of helpful parts are removed, not to soil where they would have at once to shift for themselves, but to a kindred plant which furnishes nutriment from the very first.

As we have seen in the examination of seedlings and cuttings, roots can start from different points of the stem. In some cases, they can arise from the leaf-stalk or even from the leaf-blade itself. The root, whatever its origin in any case may be, grows in length only in one way; namely, at a point just behind its very tip. This growing point is usually protected by a peculiar cap, which insinuates its way through the crevices of the soil. If roots should grow as stems escaping from the bud-state do, — that is, throughout their whole length, — they would speedily become distorted. But, since they grow at the protected tips, they can make their way through the interstices of soil, which from its compactness would otherwise forbid their progress.

[The relation of roots to soil were spoken of in detail.]

If the roots of the youngest seedlings of wheat or flax are carefully examined, they will be seen to be covered, except near

the tip, by a very delicate fuzz made up of extremely fine hairs. These are the root-hairs, which serve to take up the water-food for plants. They are so exquisitely delicate that the slightest touch crushes them; and, if the plant is lifted from the soil, all the root-hairs are left behind, or else a few hold fast to finer particles of soil which are brought away.

Of course, a microscope is very necessary in any careful examination of root-hairs; but the hairs can be seen without one in the cases mentioned, and in some others, where they are looked for carefully. It is these root-hairs, and not the very tips of the roots, which absorb water. This can be studied practically in the way pointed out by Ohlert, a German school-teacher, who first published, in 1837, an account of root-hairs. The tips may be carefully removed, and the wounds painted over, and the roots placed again in water, where the hairs can have a chance to absorb, if this is their office.

Root-hairs are found only on the newer parts of roots; and these are, therefore, the only active absorbents of dilute aqueous solutions."

By the root-hairs, dilute solutions are carried up from the soil to green tissue upon the younger stems and in green leaves. Here the dilute solutions become more concentrated by evaporation and transpiration, a process which in the leaf is governed largely by delicately balanced valves which are chiefly on their under surface. "Within the tissue of green leaves, there can be found granules of a leaf-green substance. Under the influence of sunlight, carbon dioxide, a gas which exists as an impurity in the atmosphere, and which is readily taken up by green leaves, undergoes, together with the water within the leaf, changes which end in the formation of starch or something very much like it. While such an operation is going on, oxygen is given off by the leaves. The relations of oxygen and carbon dioxide to animal respiration are to be pointed out to the pupils; and it is to be made clear that the evolution of oxygen from green leaves, goes on only in the light. In all its kinds of activity, except that of leaf-green in sunlight, the plant takes in oxygen and gives off carbon dioxide. But the work of leaf-green in sunlight, namely, the conversion of inorganic matter into organic substance, is the chief work of the common plants about which we have been studying. This work is *assimilation.*

The assimilated product made by green leaves in sunlight is stored up in many forms and in many places, such as roots,

stems under and above ground, leaves, and seeds. It is used for many purposes, chiefly the following: making wood, and the like, building up new parts, forming flowers, and making seeds.

To sum up the work of green tissues, whether on the stem or in leaves themselves, it may be said that they lift dilute solutions from the roots to the light and air, there concentrating them; that they are the factories where starch or something very similar is made."

[The effect of plants on the air of rooms, and the relation of plants to poisonous gases in the air of cities, were described at considerable length. Wardian cases and window gardening were also treated of.]

"When the trunk of a tree or the stem of an herbaceous plant is carefully burned in the open air, there remains behind a certain amount of rusty-gray ashes. This substance represents the mineral matters taken in solution by the roots, and now changed somewhat by combustion. Some plants contain more of this mineral matter than do others, but all of them have a trace; and there is a substantial agreement in the chemical elements of the ash of different plants. Some of the elements which have been detected in the ash are Iron, Potassium, Calcium, Magnesium, Phosphorus, and Sulphur. These exist in composition in the ash,—for instance, the Potassium is there a carbonate; but as to the manner in which they existed in the plant, and how they were there compounded, authors are not exactly agreed. Nor is it precisely known what part each plays in the life and health of the plant. There is good reason for believing that Iron is indispensable to the efficiency of chlorophyll, and that the salts of Potassium have much to do with the production of starch. Besides the substances just mentioned, some compound of Nitrogen is essential to the growth of plants; and this is furnished, likewise, through the roots. If, therefore, it is desired to have plants grow in a healthy and vigorous manner, they must not only be placed under the requisite physical conditions, but good food in proper amount must be furnished.

Plants, as we have already seen, obtain their carbonic acid of the atmosphere. The soil furnishes other kinds of matter used as plant-food. To show how small a part is taken in certain cases by the mineral constituents of plant-food, it may be well to call to mind one of the earliest experiments upon the subject of vegetable nutrition. Van Helmont placed in a proper receptacle exactly two hundred pounds of carefully dried soil, and

then planted therein a willow, which weighed just five pounds. The soil was enclosed by a cover so that no dust from outside could reach it; and it was kept moist with enough water, as occasion required, for five years. At the end of that time, the willow was removed, and the soil separated carefully from the roots. The willow weighed, then, one hundred and sixty-four pounds; but the soil, again thoroughly dried, as at first, had lost only two ounces! Although the experiment was not conducted with the exactness which characterizes modern research, it was a very excellent one for the time in which it was performed. It must be added that Van Helmont erroneously concluded that the plant had taken all its nourishment from the water, whereas we know to-day that the plant obtains from the atmosphere a large part of the material out of which its structure is made."

[The relations of the soil and other surroundings to the successful treatment of garden plants and orchard trees, occupied much of the lecturer's attention at this stage of the course.]

II. From Flower to Seed.

This completes the cycle of plant-life.

"A flower is a branch, with leaves for the production of seeds. It is easy to find fault with every definition of so diversified a mechanism as a flower, but the definition just given will answer our present purpose very well.

A flower is a mechanism for the production of seeds. All parts, therefore, which are directly concerned in the production of seeds, must be taken into account. Even the floral leaves or bracts, which are only indirectly tributary to the formation of seeds, must be regarded. The outer circles, the calyx and corolla, are generally termed unessential, because they are frequently merely protective, while the stamens and the carpels are the essential parts. The carpels contain the ovules, which are to become seeds; the stamens furnish the pollen, by the indirect action of which this change is to be brought about. Therefore, we might regard the ovules and the pollen as the only essential parts in the production of seeds. Each stamen consists of an anther, which is often supported upon a filament, or slender thread. 'The anther is a sac filled with pollen, which most generally is like fine dust, but which is shown by the

microscope to consist of minute grains of characteristic shape, size, and markings. The pistil is made up of one or more carpels, distinct or more or less completely blended together, and usually comprises three parts: (1) the ovary, holding the ovules; (2) the style, surmounting the ovary; and (3) the stigma, a point, or knob, or line of sticky surface at the side or summit of the style. The style may be wholly wanting. When the pollen acts upon the stigma, each grain may send down, after a time, a slender tube, which at last reaches an ovule. Here the contents of the tube act in some way upon the contents of a cell, or a group of cells, in the ovule, in which a new development begins, ending in the production of an embryo plant. The ripened ovule is a seed; the ripened ovary, with its contents, and often with some of its contiguous parts adherent, constitutes the fruit." It would seem, therefore, at first sight, as if flowers, in order to perfect seeds most readily, ought to be so constructed that the pollen can fall upon or reach the stigma without any difficulty. In some flowers, like the late and small flowers of our violets, and in a great many other cases, this is so: the pollen is placed by the anther directly upon the stigma, or the stamen is so placed that the pollen can very easily fall upon the stigma. But there are innumrerable instances of just the opposite; and in these cases the tansfer of the pollen must be made by the wind, by insects, or by some agent. Some plants have the stamens only, while others of the same species have only the pistils. Willows are good examples of this kind of separation. Indian Corn is an example of a less complete separation. In this, the flowers with stamens form the plume above, and the pistils make up the ears with the silk (the styles and stigmas) below. The transfer of the pollen of Indian Corn is made by the wind, which can carry such dry dust to long distances. The pollen of our forest trees and shrubs is transferred by the same means, and it frequently falls by the way, collecting in large quantities on the leeward shores of lakes, where it resembles sulphur. There are many cases of separation of the stamens and pistil, which are just as complete as Willow and Indian Corn, so far as the possibility of the pollen reaching the stigma without help is concerned; and yet the stamens and pistils are in the very same flower. For instance, in some orchids the pollen is packed away in a little pocket, from which it cannot fail to reach the stigma, but from which it is readily detached by the insect which comes to the flower in search of nectar. The

insect unconsciously carries the package of pollen off to another flower, and here it is brought in contact with the stigma of that flower. These are among the most striking cases of complicated mechanism by which an end is reached.

The object at present is merely to call attention to the interesting field opened before every observer of flowers. The transfer, in many cases, must be made by insect aid; but how can insects be made to work for something which does not concern them? There are a few insects which are pollen-eaters. Such, coming to flowers for the pollen they get, might scatter more or less pollen around, and transfer some of it from one blossom to another? but there are more which are fond of the nectar of flowers. The nectar is for insects. It occurs in very diverse places in different blossoms, but it is almost always extensively and attractively advertised. Bright colors, with striking contrasts (the "nectar spot"), or with lines of contrasting color converging towards the cup of nectar (the "nectar guides"), show the insect visitors where their food can be found. A little attention will make clear the meaning of many of the colors which otherwise might be passed by without thought."

Odors in flowers are, in general, indicative of the presence of nectar. The crossing between varieties of the same species of plant produces seeds which, in general, yield stronger plants than those which result from the action of the pollen of a flower upon the ovules of the same flower, or even upon the ovules of another flower on the same plant. The crossing between well marked varieties has given rise to some of the most desirable garden plants now cultivated, and plants from such crossing have been incorrectly called *Hybrids*. This term should be restricted to the crossing of different species; by hybridination in fertile cases, very extraordinary results have been reached.

(The method of crossing, and the results, were very fully explained, and rules were laid down for the guidance of intelligent students. Such rules are based, for the most part, upon the studies of German investigators.)

When a good variety has been obtained by chance, as we call it, or from successful crossing, it must be perpetuated by some form of colonization, or bud-separation.

(This, in all its practical forms, was discussed, and certain special cases were referred to; for instance, the mutual relation of stock and scion, and the judicious selection of each.)

Following this came a brief history of the plants of the kitchen-garden, the flower-garden and orchard, tracing the improvement of varieties from their origination down to the present time, and rules for their further improvement were given. These rules, in every case, must be sought in the field of Scientific Botany.

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society:

The Librarian does not desire to occupy much of your time by his report. He only wishes to give you such information as seems to him desirable, that you may understand the condition of the Library.

During the past winter quite a number of desirable books were placed in the Library, by the Library Committee, which seemed o meet a want that was felt by many of our gardeners, and he believes that the introduction of those books into the Library, has had much to do in increasing the number of books taken from the Library, the number this year being double that of last year.

Without further comment, he will give the additions to the Library the past year.

Native Flowers and Ferns; by Thomas Meehan; parts 13 and 14; Society.

Vegetable Plants; by J. F. Tillinghast; Society.

Native Flowers and Ferns; by Thomas Meehan; parts 15 and 16; Society.

Ferns of North America; by Prof. D. C. Eaton; parts 10 and 11; Society.

Winter Greeneries; by Edwin A. Johnson, D.D.; Society.

Play and Profit in Garden; by Rev. E. P. Roe; Society.

Talks on Manures; by Jos. Harris, M. S.; Society.

Native Flowers and Ferns; by Thomas Meehan; parts 17 and 18 Society.

Garden, The; an Illustrated Weekly Journal of Gardening, founded and conducted by Wm. Robinson; vol. 15; 4to; London, 1879 (still publishing); Society.

Gardener's Chronicle, The; vol. 12; 1879; a Weekly Illustrated Journal; Society.

Agricultural Gazette, The; an Illustrated Journal for Farmers; 1879; Society.

Villa Gardener, The; 1879; 8vo.; London; a monthly periodical; Society.

American Agriculturist, The; vol. 38; 1879: folio: Society.

Transactions Massachusetts Horticultural Society; 1878; part 2d; by Robert Manning, Secretary.

Gardener's Monthly, The; vol. 21; 1879; 8vo.; edited by Thomas Meehan; Society.

Country Gentleman, The; vol. 44; 1879; Society.

Massachusetts Ploughman, The; vol. 38; 1879; from George H. Noyes, publisher.

Native Flowers and Ferns; by Thomas Meehan; parts 19 and 20; Society.

Ferns of North America; by Prof. D. C. Eaton: parts 12 and 13; Society.

Text-Book of Botany; by Julius Sachs, Prof. of Botany; Society.

How Crops Feed; by Samuel W. Johnson, M. A.; Society.

Pardee's Strawberry Culture; Society.

Field's Pea Culture; Society.

High Farming without Manure; by M. George Ville; Society.

Tim Bunker's Papers on Yankee Farming; Society.

Open Air Grape Culture; by John Phin; Society.

Chemistry of the Farm and the Sea; by James R. Nichols, M. D.; Society.

Culture of Small Fruits; by E. P. Roe; Society.

Our Farm of Four Acres; Society.

Farming with Green Manures; by C. Harlan, M. D; Society.

Squashes; How to Grow Them; by Jas. J. H. Gregory; Society.

Onion Raising; The Way to Raise Them; by Jas. J. H. Gregory; Society.

Carrots; How to Grow, Keep and Feed Them; by James J. H. Gregory; Society.

How Crops Grow; by Samuel W. Johnson, M. A.; Society.

Semi-Tropical Magazine; 1876; edited by Harrison Reed; Society.

Native Flowers and Ferns; by Thomas Meehan; parts 21, 22, 23 and 24; Society.

Florist and Pomologist; 1878; Thomas Moore, F. L. S. editor; Society.

Curtis' Botanical Magazine; vol. 34; by Joseph Dalton Hooker, M. D.; C. B. &c.; Society.

Journal of Horticulture; vols. 34 and 35; conducted by G. W. Johnson, F. R. H. S.; Society.

Floral Magazine; Figures and descriptions of the choicest new Flowers for the Garden or Conservatory; by Richard Deane; new series; 1878; large 8vo.; 47 large colored plates; London; Society.

Ferns of North America; by Prof. D. C. Eaton; parts 14, 15, 16 and 17, 18 and 19, 20 and 21; Society.

Annual Report of Board of Agriculture of N. H.; by James O. Adams, Secretary; 1877 and 1878.

Transactions Massachusetts Horticultural Society; parts 1 and 2; also Schedule of Prizes; by E. W. Buswell, Treasurer.

All of which is respectfully submitted.

JOHN C. NEWTON,
Librarian.

HALL OF FLORA,
Nov. 5th, 1879.

ANNUAL REPORT OF THE SECRETARY.

To the Members of the Worcester County Horticultural Society:

On the third day of March, A.D. 1842, the General Court of Massachusetts passed an "Act to incorporate John Green, "Anthony Chase, Frederic W. Paine, * * * their "associates and successors," by the name of the "Worcester "County Horticultural Society." John Green and Frederic W. Paine, were, long since, gathered to their fathers. Within the last twelve months Anthony Chase has followed them, leaving behind him the treasured memories of a long life spent in usefulness and honor. With his death closes the earliest chapter in our history. What Horticulture was, when he and his associates assumed the serious task of

"Advancing its science and improving its practice,"

there are few present old enough to remember. What it now is; and has become, mainly through the precept and example of those pioneers in the cause; you, the living members of this Society, can see for yourselves, in this commodious Hall, the valuable Library that surrounds us, and, more manifest yet, in the garden and orchard which everywhere, throughout town and county, blossom and yield in wanton profuseness. If Mr. Chase took a less conspicuous part than others, more demonstrative than himself, his zeal was not inferior nor his co-operation less efficient. His patience was illustrated in the testing of new varieties of fruit, for the introduction of which he may have been indebted to the enterprise of either Earle, or of Colton;

but in determining whose real merits no one was more earnest or apt. He was, perhaps, the last of our original members to relinquish the cultivation of the Plum; exhibiting specimens, in excellence and variety, long after every one else had succumbed to the black-knot and curculio. Of an equable temperament, he was well fitted for a pursuit that has no place for passion and yields no returns to impatience.

"*Their associates and successors!*" Do you realize that the entire responsibility has devolved upon yourselves? That it is for you, exclusively, so to direct the operations of this Society as to justify the prescience of its founders and vindicate your title to follow

"*Si non passibus æquis,*"

at least haltingly, in their footsteps. And it was a long step in advance which was taken, under your sanction, during the early winter.

These Reports have urged, for years, that this Society should encourage the study of BOTANY,—not merely for its own sake; or that our young women should be taught to distinguish those herbs whose savory messes are a substitute for love; but, more selfishly, as a means to an end. Much of the interest attaching to, or derived from our exhibitions, must be credited to the Floral displays that have been maintained with creditable success and without sensible intermission. As the city increases—for the guidance of the Society is ever more and more surrendered to the city—space for the Garden and Orchard must become yet closer restricted. Parlor-plants, however, will continue to be grown; while conservatories and green-houses are fostered, rather than diminished, as settlement and population concentrate. Whatsoever, then, tends to diffuse a wider knowledge of the manner in which plants grow, and in what simplest and best way to grow them, comes within your especial province, as "advancing the science and improving the practice of Horticulture." Looking to this object, the Committee on the Library—being authorized by a vote of the TRUSTEES—engaged PROFESSOR GEORGE L.

GOODALE, of the University at Cambridge, to deliver a course of four lectures upon themes of congenial and cognate interest. The audiences might have been larger, with benefit to the community. But at that marriage-feast of old, they which were bidden were not worthy. Still, the supper was consumed. In this case, you will have eaten your cake and — have it. For, at the request of your Secretary, PROF. GOODALE has prepared outlines of those Lectures, which, when published,— to use his own phrase,— will constitute a "printed guide to the principles of modern Horticulture." Could you have made a better investment, although you had bestowed a few more premiums upon the Baldwin apple ?

In his latest Annual Report, your Secretary remarked that: "Our *Weekly Exhibitions* have been the life of the Society. But the faintest breath quivered in its nostrils when they were instituted. They awakened interest, commanded attention, and invited membership. Attracting the first flowers of spring, they could be made, by proper direction, to fill each successive week throughout the year, with ample suggestiveness to the eye or palate, until their close with the last fruits of winter. Every Exhibition would then have a freshness that can be attained in no other way. And novelty has a charm in itself. Your earnest attention is solicited for the policy, simply outlined as it is, of relinquishing the oppressive and unwieldy *Annual Autumnal Exhibitions* and applying the energy and means, absolutely wasted upon them, to magnify the Weekly displays."

The suggestion found acceptance, and the policy therein outlined, favor with your TRUSTEES. Under their instructions a schedule was framed that, with all its imperfections, has worked to the realization of our common aim. An Exhibition was held December 5th, A. D. 1878, whereat a creditable display of Fruit inaugurated the new system. The meetings have been sustained without intermission; their success varying as to numbers in attendance, or articles displayed; but at no time without some indication of public interest. Criticism may perhaps

cavil at the conditions of a schedule which suffers awards — whether under their own specific names, or as "any other variety"—for such vain repetitions as the following :

Baldwin — Eight (8) distinct premiums,			- -	$7 00
Hubb. Nonesuch — Five (5) distinct premiums,			-	6 50
R. I. Greening — Six (6)	"	"	- -	6 50
Rox. Russett — Five (5)	"	"	- -	5 50

"Qui facit per alium, facit per se!"

"Tut! tut! young man!" interrupted *Chief Justice* Marshall; "assume that the Court knows something!" Has not Horticulture long since determined that certain varieties of Orchard-Fruits render a sure harvest? Why thus continue to waste money in premiums, or gratuities, for their exhibition or growth, unless the specimens are of surpassing excellence? Is it not infinitely better to stimulate the introduction or development of strange genera or species, which, in their natural evolution, may disclose ever new and superior forms and qualities? Surely at last, if at all, the Baldwin or Rhode Island Greening may claim precedence upon their conceded merits; and, "like good wine, need no bush."

The *Floral Exhibitions* opened on the 6th of March, a date somewhat earlier than usual, with a display of Hyacinths and Chinese Primula. The Azalea Indica and Cyclamen followed after a fortnight's interval. The specimens, upon either occasion, were from such various sources as to indicate a more general culture of those species of house-plants :— none of which exact unusual care, while all yield an ample return of rich bloom in the dead of winter. The plants of Azalea Indica that were successful in the competition, merit notice here because of their symmetry—which was simply perfect. Last year :—"some "of the best bloomers were drawn, from unilateral exposure to "the sun; and others were distorted in shape, to meet the unnat-"ural requirements of their growers." It is to be hoped that the lesson from *Whitinsville* may be profitable for instruction. Similar patience and skill may achieve like results.

Those Vernal Exhibitions were happily exempt from the fierce vicissitudes of temperature that have heretofore blighted the articles, alike with the hopes, of contributors. The afternoon of the next Exhibition, however, April 17th, was signalized by a cold N. E. wind, with sleet and snow towards the morning of Friday, thus alternating until Saturday night. The storm was one of the severest, and the volume of mingled snow, sleet, and rain as great as in the most violent storms of winter. How much this change of temperature had to do with the admitted reduction in the yield of many *Small Fruits* is a problem for any one to solve. Possibly, like most others, it will be decided according to the pre conceived theory or prejudice of individuals. "But, sir! the facts conflict with your theory!" "So much the worse for the facts!" is the flippant retort of the man who is never wise save in his own conceit.

The Annual Exhibition of ROSES in 1879, was held, for the first time in a long while, at a date distinct from that assigned for Strawberries. The display may be characterized as fairly good. And yet, years since, a number of close competitors, by their keen rivalry, argued a more general interest than now, when all the premiums are awarded, if deservedly, yet by sheer necessity, to a single individual. Does it not seem as though florists might be found among the numerous members of this Society, elsewhere than in Whitinsville, zealous and able to develop the Rose into something like the perfection that it is made to attain in other parts of the Commonwealth? No one will contend, for a moment, that floricultural patience and skill are limited to Concord, Massachusetts. But what kind of ambition is that which contents itself with the growth of *Geranium* or *Petunia;* or is satisfied with some faint illusion of new shade in *Aquilegia cerulea hybrida!* A Society maintaining the rank that this deservedly does, abroad, should lay no unworthy offerings upon the shrine of Flora. Let its members elect, rather, by all honorable effort, to magnify their office!

The Annual Exhibition of STRAWBERRIES had been appointed for a week later than usual, or than long experience had sug-

gested; but it became necessary to anticipate the schedule date. Remarkable for the number of new varieties shown for the first time, whose value for general cultivation is at least questionable; and, at any rate, too uncertain to be demonstrated, or even tested, without much pains and toil, by the average pomologist: it was still more noticeable for the absence of species, approved by experience, and proved to be adapted to our varying conditions of temperature and soil, as well as tempting to the common palate. It would be a grievous error to drop the Downer, or Jenny Lind, the Triomphe de Gand, or Wilson, from garden cultivation; because Presidents, Americans, or Monarchs, have swollen like puff-balls. Bulk is not inconsistent with excellence, as the Doyenné du Comice illustrates among Pears: but what concerns you chiefly, as would-be cultivators, is not how many bites there may be to a cherry, but whether that especial cherry is good enough to pay you for disputing its possession with the "worm i' the bud."

A dish of Hovey's Seedling was exhibited by one of your *Vice-Presidents* that elicited a note of interrogation from the Committee, which was strangely mistaken: —

> Then necks were craned and heads are louted low
> In puzzled inquisition: ears wave pendulous and slow.
> Each bundle tempted: Hovey? or not! Alas!
> Leave it unsettled; — own yourself an ass!
> The plants from Hovey came, and Hovey knows
> Whether skunk-cabbage ever smelt like rose.
> And yet, committees sometimes justly bray
> Since Beurre d'Anjou ripens Suzette de Bavay.

Currants were exhibited, during their season, in about their average force and variety. With rare exceptions, however, cultivators appeared to have limited their efforts to La Versaillaise and the Red Dutch. It is to be hoped that the latter will never be utterly supplanted. Other kinds may yield larger berries; although abundant manure will do much to equalize apparent, rather than real deficiencies: but, for an ample crop of honest, ripe, sweet fruit, the good old Red or White Dutch can hold

their own against all comers. Moreover, — as regards Currants in general, — did any one ever find himself overstocked with them; so that his children would not pick them from the bushes, or the hucksters take them off their hands?

There was a woful falling-off in the display of RASPBERRIES during the Summer just passed. That there were any, is almost wholly due to the enterprise of a single cultivator, who has found that other things may be grown in the Tatnuck region, equally suited with the Jucunda to "put money in the purse." Not a specimen of Brinckle's Orange was placed upon our tables. Had your *Secretary* finally relinquished its culture, after his many eulogies of its fecundity and unapproachable excellence, he would merit your indignant censure. But it is a severe tax upon any piece of ground to be required to bear Raspberries for eighteen successive years, and a new plantation demands time to become productive. The Northumberland Fillbasket well upheld the reputation that it has earned for itself, in Worcester; and which but few pomologists elsewhere seem disposed to accord. In fact, that variety can be but little known, if your *Secretary* may judge from his correspondence with nurserymen and from their published catalogues. An ignorance of a variety — perhaps unequalled — that is absolutely discreditable to gentlemen who would prepare a complete Catalogue of the Fruits of America.

Your *Secretary* will confess himself somewhat puzzled. Are experts actually ignorant? or do not varieties exist whereof they confess that they know nothing? Years since, in response to an appeal from California for information, he learned what follows: —

"KNOX FRUIT FARM AND NURSERIES.

"PITTSBURG, PA., August 3, 1875.

"TO EDW. W. LINCOLN, ESQ.,

"*Dear Sir:*

* * * * * * * * *

"We have never grown the Northumberland Fillbasket, and know very "little about it.

"The Hornet is the grandest Raspberry we have ever grown, and we "think in California it would surpass all varieties, where it would be entirely "hardy. We pick these berries, with their stems like Strawberries, and "they equal Strawberries for size, — that is, medium Strawberries. It is a "strong grower and great bearer, continuing a long time in bearing. It "is not hardy here, although, *last* Winter, strange as it may seem, the canes "mostly were uninjured, although unprotected. Which we regard as a "proof of Mr. Meehan's theory that the cause of Raspberry plants being "winter-killed is owing to imperfectly ripened wood, caused by mildew or "rust. &c., &c., &c.

(Signed) GRIMES & MEYER."

Eulogistic notices of the *Hornet* continuing to attract his attention, in later years, your *Secretary*, with whom the development of the *Rubus Idaeus* was ever a passion, was led to procure some of the genuine plants. Upon exhibiting their fruit, however, for the first time, it was found to differ so decidedly, in all respects, from that which was entered under the same name, by *Vice-President* Hadwen, that a spurious sort was evidently in the market. Mr. Hadwen had obtained his from Mr. C. M. Hovey,* who admitted that he was somewhat skeptical as to its genuineness. My own came from Mr. Meehan, who answered an inquiry as to its purity and origin: — that he had no reason to distrust it; that he had procured his stock from two Frenchmen in his neighborhood; and that he had noticed its resemblance to the Northumberland Fillbasket. In an issue of the *Gardeners' Monthly*, (which he has so long conducted with signal success,) during the last Summer, he thus refers to a plantation of this variety under his direct observation, in Germantown:

"The canes, with their foliage, were models of health and "beauty, and were borne down, or would have been had they "not been tied, by their weight of fruit, and *such* fruit! Though "Herstine, Philadelphia, and other well-known kinds were "there and as well cared for, none of them had such large " berries or would fill the bowl, as well as 'the bill,' as these. "The berries were at least one-third larger than Herstine, &c., "&c." He continues, enlarging upon their long continuance

* A mistake: Mr. Hovey's skepticism is however, authentic. E. W. L.

in bearing, and declares authoritatively that the name is French and should be pronounced, — *Hornay!*

Your *Secretary* has been impressed with its strong resemblance to the Northumberland, and would not doubt their identity, did not the *Hornet* occasionally offer a larger berry and appear more tenacious of its foliage.

Should this matter seem to have claimed too much attention, it must be borne in mind that you were incorporated to "improve "the science" of Horticulture; whereof an exact and definite Nomenclature must ever constitute a significant feature. No Society can afford to encourage spurious genera or species. You declined to do so, heretofore, in a flagrant instance. * There cannot be too much caution, although future precise observation should determine it to be needless among Raspberries.

The matter of a correct NOMENCLATURE has been referred to incidentally. But can its actual importance be exaggerated? How many of the Members of this Society pause to consider what a card means, inscribed — "For name?" — or how much anxiety and positive labor such requests impose. Whatever self-interest or prejudice may be disposed to allege against any of your other Committees; — none have been moved by "envy, "hatred or malice," (from which, here as elsewhere, "Good Lord deliver us!") to challenge the competency of your Committee on Nomenclature. Your *Secretary*, at least, from an official observation of almost twenty years in duration, can attest to the close devotion of that Committee, with its membership changed but by death, to their more than usually thankless task. You are solicited to plant a Pear-tree named *Fondante d' Automne*. Precise nomenclature assures you that such Roses will smell as sweet if called *Belle Lucrative*. You are told that the *Brockworth Park* is one of the best Pears recently introduced; and the proof of that pudding makes you acquainted with the *Bonne de Zëes*, — of approved character and without cause for change of name. An illustration of the general subject may be drawn from the subjoined letter, written by one who has no superior as a Pomologist, and who will perhaps par-

* In the case of the so-called "Main Grape."

don its publication, because prompted by a desire to advance interests which he has so much at heart: —

"MOUNT HOPE NURSERIES.

"ROCHESTER, N. Y., Dec. 10, 1878.

"EDWARD W. LINCOLN, ESQ.,
"WORCESTER, MASS.
"*Dear Sir*:

"Yours of 7th inst., is at hand.

"'Bonne des Puits d' Ansault' is an unwieldy name for an English speak-
"ing people. Ansault is sufficient. There is just this objection to it: that
"Ansault being the name of a place, there might be other varieties bearing
"its name, as in the case of Anjou. It has been suggested to call Beurre
"d' Anjou simply Anjou: but we have Bonne Anjou, Rouge d' Anjou,
"&c., &c.

"We ought to make our catalogue conform to the Pomological Society's
"Catalogue: — that it has not been done is an oversight. But 'Swan's
"Orange' is the first name, — has many years of priority to Onondaga.
"Between forty and fifty years ago this Pear was brought, without a name,
"from Hamilton County, N. Y., to Rochester, by the late Gen. Swan; and a
"Horticultural Society, then existing here, called it Swan's Orange. It was
"wrong to change it. It was done at the suggestion of Gen. Leavenworth,
"of Syracuse, who wished to identify the pear with his County — Onondaga

* * * * * * * * *

"If practicable, there should be an English name given to all fruits intro-
"duced from non-English-speaking countries. It would be a nice little chore
"for the Pomological Society.

"You have a very able, active Society. Why not take this up at your
"leisure?

"Yours Truly,
"PATRICK BARRY, (E. & B.)"

Admit that Swan's Orange had the priority: somebody must determine. The AMERICAN POMOLOGICAL SOCIETY — of which Mr. Barry is *Vice-President* — has decided that the pear shall be called Onondaga. To whom shall an appeal be taken?

And then, again, why *not* 'Anjou?' The fact that there may be also a Bonne Anjou, or Rouge d' Anjou, need occasion no conflict.

"Where the O'Donohue sits, *there* is the head of the table."

"*Ansault* is sufficient,"—as Mr. Barry says. When the place produces another pear worth naming — name it! Until then, sufficient unto the day be the pear, like the evil thereof. The Josephine de Malines and Winter Nelis originated in the same city. Nomenclature has few difficulties that we do not create for ourselves; and all combined are less troublesome than would be caused by the disuse of a foreign or dead language.

The plague of FRUGIVOROUS BIRDS has continued with us throughout the past year. As though it were not enough for the fruit-grower to have his enemies in-lawed; he must also see his prospects of redress grow dim in consequence of deliberate efforts to spread false information. Let Shakespeare and Milton hide their diminished heads! as the *Monthly Reader*, "circulated among the schools," utters the following "Plea of the Sparrow:"

> "So don't, good master, grieve us,
> But cheer us and relieve us;
> And we will eat, next season,
> The canker-worms your trees on."

How can any one expect the young idea to "shoot," when loaded with a full charge of such bathos!

But hark to a man who knows something! Who was, in fact, dismissed from the Department of Agriculture for that singularity! *Professor* C. V. Riley, in a letter to the *Commissioners* of the District of Columbia, expresses the opinion that "the "English sparrows have been useful in ridding the shade-trees "of cities of the canker-worm, but believes that they will become "great pests in time to the farmer and fruit-grower. He be-"lieves that the insects most troublesome to the fruit-grower "are not touched by this sparrow. It does not save the elm "from being riddled by the *Galeruca*. He does not believe it "possible to exterminate the bird *now*, but would not protect "it,—letting it take its chances." And he adds,—what your *Secretary*, having implicit faith in the boys of Worcester, takes pleasure in publishing more widely:—"One thing is certain;

"that those who do not want the bird on their premises will "have a good luxury in sparrow pies."

Is it possible that there are neither Apple or Cherry Orchards in Washington? Other cities — of inferior population — perhaps consequence — are not as destitute. Yet *Professor* Riley does not speak of the Apple, and Cherry, or even the Strawberry, as exempt from insect-ravage; for, indeed, how could he, unless they are far luckier in the Federal District than their congeners elsewhere.

Dr. Elliott Coues, in the *American Naturalist,* classes sparrows among "the injurious agencies of Nature; they seeming "to devour insects *only when they cannot get garbage, grain, or* "*young herbs to eat.* Removed from the natural checks upon "increase which surround a bird in its native land, and trans-"planted into a new region where they were in the midst of "unnatural conditions, of course all their strong traits became "stronger."

Dr. Dixwell's dissection of the stomachs of thirty-nine sparrows,— male and female; during the height of the canker-worm pest in the Jamaica Plains district, in our own Commonwealth; by which no trace of insect or worms was disclosed; furnishes but a single instance from the many that betray the granivorous nature of the species. Should not such a precise test, indeed, influence *Professor* Riley to revise an over-hasty inference, and to concur in the conclusion of the majority of careful observers that neither this stranger, nor our native birds, have diminished to any appreciable extent, the plague of worms upon fruit-trees in town or country.

One English writer, who carries water upon both shoulders with a marvellous equipoise, is very mellifluous. He would seem almost qualified to bear a torch in the next campaign for the salvation of a Union that was thought to be cemented in blood, but which must be saved over again, under stress of partisan mendicancy, at least quadrennially. Just listen: "Pom-"ologists are somewhat divided as to the benefits or injury "derived from the *soft*-billed birds. The robin ("soft-billed"

"*Turdus*!) especially comes in for a good share of reprobation "during the season of Small Fruits. Nevertheless, we see no "reason to doubt the value even of this fruit-loving bird, if "proper means are taken to protect the fruit during its ripen-"ing. "*A little shooting goes a long way.*" It does that! in Worcester carrying you to the Police Court.

A naturalist — he defines the distinction between their habits — seldom observed or stated with such clearness; and which, if preserved, would modify objection to their increase or diffusion: "The Swallow, Swift, and Night-hawk, are the guardians of the "atmosphere. Woodpeckers, creepers, &c., &c., are the guard-"ians of the trunks of trees. Warblers and fly-catchers protect "the foliage. Blackbirds, crows, thrushes, and larks, protect "the surface of the soil. Snipe and woodcock protect the soil "under the surface. It is a fact that nearly all birds are more "or less beneficial in destroying forms of life which, when in "excess, are wonderfully destructive to crops."

"When in excess!" Aye: but when the birds themselves are in excess — what sort of negative can you make of these two affirmatives? "*Quis custodiet custodes?*"

Never were all forms of insect-life more numerous or unmolested, in Massachusetts, whose legislation is annually invoked in wider protection of all that is winged and worthless.

Among the defects in the lamb-like character of your *Secretary*, forgetfulness is not conspicuous. Shall an Annual Report to this Society omit all mention of the *Turdus migratorius?* Hark! to a writer, in the *American Agriculturist*, from Connecticut, whose eyes are partially open: "This is a comely bird— "a fair singer and early; an industrious hunter of insects. "After his brood is hatched, he eschews his old provender and "brings up his whole family upon the costliest products of the "garden. In June, he sits on the fence and eyes the growth of "fruit; then gorges successively strawberries, cherries, cur-"rants, raspberries, and grapes."

Seeing the evil thus clearly — what remedy does he suggest? Why, the very simplest: When you are not fishing for menhaden, protect your garden with the seine!

Actual experience, during the last year, has taught your *Secretary* that there is at least one effective safeguard from the depredations of birds—*remedium felinum.* A cat—the pet of a young daughter—has not failed to supply her successive broods with their daily *turdus.* It cannot be claimed that she is of any improved breed, nor that possession of an extra toe upon either fore-foot has rendered her faculties more acute. But this at least may be asserted, with positive assurance, that she has been "bred to a feather."

If you would derive any benefit from birds—designed to be *feræ naturæ*—assuming the possibility of benefit under any circumstances,—stop domesticating and petting them! Those that were created insectivorous, will obey their instincts, if not pampered until their tastes are diverted and turned in an unnatural direction. Withhold the protection of law for a while, that their numbers may be thinned and that the report of the shot-gun may inspire a wholesome fear. Thereafter, and only then, may you engage in the ceaseless struggle with insects, which yearly grows more onerous, convinced that your chances of success are not lessened, if they have not been facilitated, by your own efforts.

That you will need all possible assistance against the *Lachnosterna fusca*—or Cock-chafer*—your *Secretary* believed when writing his last Annual Report and is more fully persuaded now. The wildest imagination is staggered, at the official statements of the countless hosts in which this insect swarms over the longest settled countries of Europe. They descended, in myriads, upon Schleswig-Holstein, about the 20th of May. School children were employed to attack them—shaking them down from trees, on which they had settled, into sheets—then into boiling water, or under rollers. On one large farm it is actually stated that 130 tons were collected and paid for at the rate of a half-penny per pound. As a practical set-off,—"the corpses make a rich manure."

"So likewise in Normandy is the *Ver Blanc* a name of terror to the gardener." Nothing escapes them. Trees are denuded

*More commonly known as the May-Beetle. E. W. L.

of their foliage by the perfect insect; while the roots of all kinds of vegetables, flowers, plants, and even young trees are devoured by the *larvæ*. An individual rented several acres for a market garden and nursery. In less than a month after the buds of Roses were well set, the grub cleared all before him. Of 7,000 briars (stocks for the Rose), scarcely as many hundred were spared.

It is to be feared that few realize the wide diffusion of this insect in New England; and that still fewer adequately estimate the damage that he does. The foes that assail you are neither drought nor a variable climate. They must be sought beneath your feet, in the soil that you cultivate,—alike insatiate of the roots of grasses or of the strawberry-plant. You will say — search for and exterminate them! Try it! and then admit that the word impossible should have place in horticultural if not in Napoleonic dictionaries. A portion of the Public Grounds in this city, was ploughed deeply, during the Autumn of A. D. 1877. Exposed in the furrow to the frosts and snow of Winter, it was ploughed anew in the following Spring, and again in Fall, lying fallow the while and thereafter. Once more ploughed, harrowed, and then carefully forked over, you think, do you not, that all forms of insect-life were effectually destroyed? On the contrary, the soil was literally crawling; a single spadeful would bring to light a dozen large *larvæ*. After as thorough destruction as possible, the land was finally sown. But, that you may see how ineffectual was even such deliberate work, I submit, for your inspection, a section from a stake that was thrust into the earth for the support of a flowering spike of Gladiolus. It is a sample of fifty (50) gnawed in like manner. Where shall you search for this *Lachnosterna fusca*, if he stays in the ground for three continuous years? In what manner shall you contrive to exhume him — if he descends, at some period of his maturing life,— to a depth of five (5) feet! Your *Secretary* confesses himself puzzled; and believes that it will prove a tough stint even for the *Turdus!*

In his last Annual Report, referring to a then recent Horti

cultural Exhibition in this city; nominally of the New England Agricultural Society, but in fact and substantially, furnished by our own members; your Secretary expressed his deliberate opinion that this Society should consider the matter well, before deciding to participate, by active or passive co-operation, in another similar Exhibition held at nearly the same date. "If "the New England Agricultural Society should determine to "repeat its visit to Worcester, as is more than probable; there "can be no doubt that it will be neither courteous nor politic "for us to propose an Exhibition in antagonism. Yet the "best interests of Horticulture, in this region, are measurably "committed to us; and we have no right to be recreant to the "trust. Wherein, save in the domain of Flora, is not and "would not a Horticultural Exhibition, during the first week "of September, be premature?"

Your TRUSTEES, accepting this suggestion, voted without material dissent, to relinquish, at least temporarily, the usual ANNUAL AUTUMNAL EXHIBITION of this Society. An Exhibition was however held, during the first week of September, nominally under the auspices of the New England Agricultural Society, which was successful in the collection of gate-money. A misapprehension evidently prevailed, on the part of the New England Society, whereof you should be advised, that you may do no injustice to its officers. It is properly deemed intrusion for a minister to officiate in a foreign parish without invitation or consent. Some have inferred that the New England Society was thus intentionally discourteous. But the Massachusetts *Ploughman*, its official organ, in its issue of August 30th, evidently anticipated your co-operation, for it says that "The "Massachusetts Horticultural, the Worcester Horticultural, as "well as other Societies and numerous individuals celebrated in "botanical and horticultural science, have promised most liberal "contributions to this part of the Exhibition."

Again, on September 6th, when summing up the results of the Exhibition, just closed, it observes that "the Members of "the Worcester Horticultural Society, under whose auspices

"this portion" (that at the Skating-Rink) "was held, have "good cause for congratulation in having presented the largest "and most attractive show of fruits, vegetables, and flowers, that "has ever been collected under one roof in any of the New "England States."

Waiving present consideration of the actual fact that former Exhibitions of the Worcester County Horticultural Society, in Mechanics Hall, were never even approached since, in bulk or quality; it will doubtless cause unfeigned surprise to the *Ploughman* to learn that the aid and co-operation of this Society was not even asked!

"Nothing succeeds like success," was the comment of one of our modern superficial aphorists upon the casual good luck of a Massachusetts mercenary politician.

"For what shall it profit a man if he shall gain the whole "world and lose his own soul?" said He who spake as never man spake. "*C' est magnifique! mai, ce n' est pas la guerre!*" exclaimed the bronzed veteran of France, as the Light Brigade swept by him to glory and — annihilation. The question recurs and will down at no bidding; — the question put at your last Annual Meeting and ignored at the first suggestion of a greed that cared for aught but the true interests of Horticulture; — "Wherein, save in the domain of Flora, is not and would not a Horticultural Exhibition, during the first week of September, be premature?" Barns and barracks may be stuffed to repletion with the crude harvest of late Summers. But, in what manner, and to what extent, do you thereby "encourage and advance "the Science, and improve the Practice of Horticulture," — for which, only, did JOHN GREEN, FREDERIC WILLIAM PAINE, and ANTHONY CHASE ask to be incorporated? Charles T. Foster shows the *Marie Louise* at the Town Fair in Holden; and the observant reporter notes that it has grown one-fourth in bulk within the ten days since the New England Agricultural Society invited specimens for competition. The officers of the latter-named organization pause, in their grand rounds of festivity, to establish a class of yearling bulls! No fault could fairly be

found, did the award for Glout Morceau, or Winter Nelis, specify the immaturity of those varieties; or, in even the most obscure way, inform the ignorant but curious cultivator that they should be suffered to hang upon the tree two months longer. But the motive that prompts to an exhibition of the Baldwin or Roxbury Russett, — scarcely one-fourth grown, — has nothing in common with a genuine love of Horticulture. That seeks perfection of development, — nor will be content with aught else. "Will not their money be good?" was the answer of one of our members to a protest, by your *Secretary*, against the exhibition of fruit vastly inferior to the specimens usually shown by the speaker. Of course, — if the purpose is solely to "spoil the Egyptians," it can matter but little how it is done. But, — as Horticulturists,—you cannot, if you would, divest yourselves of your personality. Whether as individuals, or as members of a committee, you will be holden to a strict responsibility for the maintenance of that high standard which you have established for these Halls; and by upholding which, for long years, you have achieved a reputation second to none among the Horticulturists of the Republic. A mess of pottage makes but poor rations, at best: and "no man can serve two "masters."

This Society has ever kept itself pure; remaining true to its original high aim, and courting favor through no meretricious attractions. In its darkest days, when the shadow of debt loomed over us; — some of your members put their hands in their pockets, and, by liberal contributions from their private substance, relieved its embarrassments and irradiated its future prospects.

Such of you as chanced to be in the audience might have heard, recently, that the aim of the New England Agricultural Society; and inferentially its wards; is, not to develop the Bull and Stallion, as had been supposed; but rather to perfect the Christian Home! You may inquire why there are, then, no specific premiums for such homes? Let it suffice for you to know, that in tracing the process of Evolution, it is wise to

revert to the protoplasm. Therefore, and most essentially, is it that from the trotting sulky and base-ball diamond may be expected the "just made perfect" saints of New England.

Our own Society can indulge in no such pious dreams. Greek, or Barbarian; Gentile, or Jew; from the Gardens of Alcinous, or those in which the Fire-Worshippers of Persia cultivate the Rose; the love of Flower and Fruit is in and of itself a species of devotion: — limited to no country, — contracted by no creed. An effort was lately made to steal your household gods. The *Attorney General* of the Republic; laboring under an optical illusion, easily explicable when it is remembered that his official gaze has been somewhat intent upon the "moonshine" of Carolina; fancied that he detected a heavenly presence in the crowd which thronged around him. Your *Secretary* would not like to vouch for Ceres, whose good manners may have been corrupted by evil communications while scouring *Avernus* for her daughter. But he can bear cordial witness to the fact that no errant fancy has ever seduced her long-time associates. And it would have been a source of deep regret, indeed, had Flora and Pomona, after keeping their virginity for so many centuries unharmed by Faun or Satyr, at last prostituted themselves, gratuitously, upon the first unclean solicitation.

In his late Semi-Centennial address before the Massachusetts Horticultural Society, Hon. Marshall P. Wilder speaks of Agriculture as having "included" Horticulture. How so wise a man could be betrayed into such a serious error would be unaccountable did we not recall his association upon the "State Board." For it was never thus; — whether under the bright Heathen Mythology, or the more ascetic Mosaic dispensation.

When God had finished the Earth — *Terra* — the fields and farms — *ager* — "behold! it was very good!" But when He would improve upon His own work, He "planted a garden" — *Hortus* — "eastward in Eden, and there He put the man whom "He had formed." Not until after Eve, — "anxious and aim-"less," — had eaten of the tree of the knowledge of evil; com-

monly accepted as the *Doyenné Boussoc;* — was man "sent forth "from the garden of Eden, to till the ground from whence he "was taken," under the dire sentence: — "in the sweat of thy "brow shalt thou eat bread!" *Hortus* — the garden — was Paradise, in its sinless innocence. *Ager* — the field, or farm, was sentence and punishment. "Cursed is the ground" — *tellus, vel ager,* — "for thy sake;" "in sorrow shalt thou eat of "it all the days of thy life. Thorns, also, and thistles shall it "bring forth to thee; and thou shalt eat the herb of the field." How different the lot of the Horticulturist! "And out of the "ground" — in the garden — "made the Lord God to grow "every tree that is pleasant to the sight, and good for food." The envious and outcast may wonder when and in what manner Paradise was regained. That is the exclusive secret as it is the sole privilege of Horticulture. Those who deny that ours are the "trees pleasant to the sight and good for food," may dispute, if it pleases them, that "the fields bring forth thorns also, "and thistles."

Shall the Worcester County Horticultural Society, under the spur of resentment, or at any other instigation, reverse its recent course and resume the Annual Exhibitions that were abandoned after a full conviction of their utter worthlessness? Your *Secretary* would unhesitatingly deprecate any such policy as a step backward in the path of progress. True; — it is not pleasant to see others "reap where they have not sown and gather where "they have not strewn." Yet that is the way of the world: for, since the first furrow was turned, the tramp has ever trodden upon the heels of the husbandman. Our professed and actual aim is, — "to advance the Science and improve the practice of Horticulture." What ought to concern us, chiefly, is; — in what best and most effectual manner may our object be attained!

It is not proposed to consume your time, and exhaust your patience, by repeating the arguments in favor of a final abandonment of the Annual Autumnal Exhibitions. Such as they were, — they have satisfied your TRUSTEES for the two years

past, and during at least, that period, concluded your action as a Society. As Horticulturists, have you any reason for genuine regret? Are you not content to persevere in the course deliberately entered upon, and, for the first time, consistently followed throughout the official year that closed with yesterday's sunset? In his Report for A. D., 1878, your SECRETARY referred to our weekly meetings as having been the life of the Society. How only the faintest breath quivered in its nostrils when they were instituted. Relating how they awakened interest, commanded attention and invited membership; he proceeded to indulge his fancy in the portrayal of a possible future: "Attracting the "first flowers of Spring, they could be made, by proper direction, "to fill each successive week throughout the year, with ample "suggestiveness to the eye or palate, until their close with the "last fruits of winter. Every Exhibition would then have a "freshness that can be attained in no other way. And novelty "has a charm in itself. Your earnest attention is solicited for "the policy, simply outlined as it is, of relinquishing the oppres-"sive and unwieldy Annual Autumnal Exhibitions, and applying "the energy and means, absolutely wasted upon them, to magnify "the Weekly displays. The importance of these, conducted as "now, when commenced each year, is found to increase by their "own momentum. They grow large enough for convenient "control, by August; yet not too large to be comprehended in "detail. What they might become, if kept up through the "whole year, can only be told after actual experiment."

And now that the experiment has been tried, it rests with you to determine wherein, and to what extent, it was a success — in what imperfect measure it was a failure? Among Plants, and Flowers, there was evident a continuous development, from the somewhat tardy Exhibition of Hyacinths until the final termination of out-door growth by a killing frost. Dates may have been appointed, untimely. No one can foresee the precise character of a season; nor predict that an interval of "ethereal mildness" will extract unnatural bloom from the gales and snows of March. Something must be trusted to experiment;

as horses have been fortunately swapped in the middle of a stream. That Society will be lucky, indeed, which can felicitate itself without reserve, upon the opportune result of a first attempt. With accumulated experience, it will be a task of comparative ease to correct mistakes in the schedule, or to remedy its deficiencies. Some Florists, as well as other some who do not aspire to that peculiar title, opine that it might be well to provide for a weekly display of *Cut Flowers*, — by Stands, in addition to the Baskets, Designs, or Dishes, that may be specifically invited. A wide discretion should be allowed the Committee; — which ought not to be expected, as no competent Committee would consent, to award Premiums irrespective of absolute, as well as relative merit. Good nature has its proper place in the social economy, but it is misplaced when it attempts to bias the judgment. Our personal friends are, of right, precious to us: yet the knowledge that a friend is among the competitors should restrain us, all the more rigidly, from doing injustice to a stranger. At the same time it is sufficient to be upright. Some men are so anxious to stand straight that they lean backwards. The just judge should be wholly without inclination: an impartiality, if difficult of attainment, all the more creditable to those who strive for it and achieve success in its pursuit, in howsoever moderate measure.

Allusions have been made, incidentally, to the growth of fruit when the specimens were suffered to mature. Some Apples, and more Pears, were plucked from the tree in early September, under the strong attraction of offered Premiums, whose crudity of shape and size could only serve to mislead. How different has been the appearance of the same varieties as displayed, in full perfection and even extreme magnitude, at our recent Weekly Meetings! Recall the St. Ghislain, and the Washington! of a size and beauty never before seen. The Doyenne du Comice, from Oak Avenue; and the Duchesse, (its plate of ten weighing ten pounds, nine and one-fourth ounces,) from Portland street; once again showing how that variety riots in the South-Eastern portion of our city. Bear in mind the specimens of

Dix (weighing six pounds and one-fourth ounce,) and of Onondaga (turning the scales at ten pounds five and one-fourth ounces), and deny, — if you can and will, — that complete development should, above all, be required by a Horticultural Society that would be true to its mission!

All this is possible with Weekly Exhibitions. That it is not of more than qualified attainment, in any other way, you well know from unsatisfactory experience in the past. The Annual Autumnal Exhibitions heaped up a profusion of Flowers, Fruits, and Vegetables, — just as they could be had. "Beggars must not be choosers!" is an old saw, and modern instance. You called for them: — and they were brought. It is no wonder, that, having at heart the best interests of Horticulture, you soon tired of a method of display which was only not chaos because not absolutely formless and void. You are now doing well. Why not let well enough alone? It is the consistent and matured opinion of your *Secretary* that you would only go further to fare worse.

Your older Members, who were privileged in a personal acquaintance with John Milton Earle, have been gratified to behold, during the past September, some superb specimens of his seedling Pear which, during his life-time and with his consent, your *Secretary* was permitted to name — *Earle's Bergamot.* The thanks of all lovers of good fruit are due to our associate, Mr. Velette P. Townsend, whose hearty appreciation led him to procure scions whereby the new variety was doubtless saved from extinction. No better nor more appropriate monument could be erected to the memory of our deceased friend than this which he thus innocently reared for himself. The specimens shown this year, manifested their descent from the Belle Lucrative, in form and abundant juiciness; while their color was vivid enough for the Beurre Montgeron. The lack of a decided flavor, which is the chief deficiency of the Belle Lucrative, is supplied in its character of Bergamot. These Reports have heretofore indulged in high anticipations based upon confidence in Mr. Earle's rare judgment and *bona fides.* Those

sanguine hopes are evidently to be amply justified by a felicitous concurrence of time and experiment: —

"Sic itur ad astra."

This Society was officially invited, in the early Summer, to send delegates to the Seventeenth Session of the AMERICAN POMOLOGICAL SOCIETY, — to be held in Rochester, New York. According to a practice, of original establishment and subsequent acquiescence, credentials were issued by the *Secretary*, to the following representative Members: —

William T. Merrifield, Stephen Salisbury, Philip L. Moen, Obediah B. Hadwen, James F. Allen, George E. Francis, Henry Phelps, William H. Earle, Frank J. Kinney, Henry L. Parker, George Cruickshanks, William W. Cook, Calvin L. Hartshorn, F. M. Marble, John C. Newton, Edward W. Lincoln.

Some of those delegates attended, although fewer than could have been desired. It is to be feared, however, that such will always be the case so long as the American Pomological Society persists in holding its meetings at a season when every one is busy. The date would not be objectionable, perhaps, were it the simple aim and end of the American Society to hold an Exhibition of Fruit. But the actual inspection of specimens is not the purpose of those sessions.

Should the Eighteenth Session of the American Pomological Society be held in Boston, as, in the Divine Mercy * may be the case, it is suggested for your seasonable consideration whether it might not be courteous, and eminently proper, for this Society to ask that one day be set apart for a visit to Worcester. Reasons in plenty may be adduced, as occasion serves, why such an invitation should be tendered and accepted. It is sufficient, now, to direct your thoughts to reflection upon the subject.

Your *Secretary* has proposed to himself, in occasional moments of enthusiasm, to indulge in speculation upon the

* The life of Marshall P. Wilder being prolonged, in response to a common prayer.

merits and possibilities of the *Shade* and *Spading-Fork.* He has sometimes persuaded himself that therein is involved the true theory and practice of future *Terræ*-culture. A similar idea was recently elaborated, from an English point of view, by the First Commoner of England,* who, in an address to his constituents and neighbors at *Hawarden,* told his belief that "one of the means by which cultivators of the soil might "improve their position, was to pay a greater amount of atten- "tion to what was called garden and spade cultivation."

If no man can consume what that man can grow, what need of any one lacking food who is willing to work? Nay, — why limit the capacity of production? Why not rather stimulate it to the utmost, — providing simultaneously for the more thorough distribution of results! Multitudes in far-off lands are even now starving for lack of the very crumbs that fall from our plethoric tables. How many, even among us, are pining from want of the fruit that actually poisons the ground in the plentitude of its decay! You say that you cannot obtain a living price for your crops. Are you certain of that? The writer conversed, lately, with that rare animal—a contented *terræ*-culturist—who feeds out fruit to his stock and expresses himself satisfied with the price that he is getting for his milk. He said that he could produce for two cents per quart, and obtain four in return. Have you ever computed the cost of growing those bushels of Bartletts and Bonne de Jerseys which you complain are unsaleable? Have you once tried (persevering continually), to diminish, and thus perfect, your crops, that their conceded excellence should compel a demand for them? Has it ever occurred to you that the conditions of a year of scarcity differ only in degree from those wherein there is a superfluity: and that, if the superfluous harvest suffered, or exacted from a tree, were checked, or only not required, there would be no such thing known as famine or plethora in alternate seasons. When the first section marched by—indifferent, or scorning the marriage-feast — a message was sent that constrained the awkward-squad.

* Mr. Gladstone.

Quite recently a Pear-tree, of the *Duchesse d'Angouleme* variety, somewhat famous in our records, was relieved of thirteen bushels of fruit. The owner — not an especially avaricious man — complained that he was offered for them but two and one-half dollars per bushel. That does seem to be an inadequate price. But — supposing, from one cause and another, that it is all which can be obtained, how much better is it than nothing? Nay, — how near would it come to a fair return upon the original investment, were that price averaged upon an acre!

From a table carefully compiled by the Messrs. Lawson, of Edinburg, it appears that the number of trees which can be planted upon an acre of ground, — at a distance apart of Thirty (30) Feet, — is as follows: Irish acre, 79; Scotch acre, 60; Imperial acre, 48. Assume, then, that your tree is suffered to bear ten (10) bushels of fruit, which will command but One Dollar for each and every bushel! Your trees cost — say $1.50 each, being more or less manured. You would then get, in return of the original investment, from an Irish acre, $790; from a Scotch acre, $600; from an Imperial acre, (Yankee by Common and Statute Law,) $480. Does even the Missionary Enterprise, or the Barre & Gardner Mortgage afford a better harvest.

But, you will say, the market is glutted. The sum mentioned was offered, however, for those bushels of Duchesse, and doubtless the purchaser felt assured of his customers. The distrust is not without reason, nevertheless, and its removal depends upon yourselves.

The old Dutch Monopoly used to burn their nutmegs when afraid that the world might be too highly spiced. It does not seem to have occurred to them that the burden might be adjusted to the back; and that the tree which bore less might be trained to bear longer. You cannot burn Apples or Pears, but you can thin out so that one barrel of full-grown and well-ripened fruit shall answer for and pay better than a hogshead of smaller, immature, or imperfect specimens. You object that to thin out your fruit exacts too much labor! Possibly:—but evade or escape the primal curse if you can! You may say

that it will not pay to do it. That, also, is possible; yet the averment could be made with greater certainty were the experiment once fairly tried. This is known: that the Dutch East India Company never came to want because nutmegs were unsalable. The market that was not found — ready to hand — they created; that is all.

How many people are there among us who have not tasted of fruit this whole season? Do you assert that it is their own fault if there are any, it costs so little? But what matters it how little, if it is too much? Will you not try, for once, to grow fewer specimens, and better as they are fewer? To mature them by so mulching the trees as to retard development under our torrid suns? To offer them at a price which is satisfactory because it is reasonable, and to rejoice if you sell them so low that no one shall, perforce, elect liver or tripe.

There are gentlemen in this presence, to whose political vision all vexed questions of finance are transparent. Who are convinced that the baser currency inevitably drives out and supplants the better and more valuable; — more valuable and better as it is the veritable and almost sole representative of the famine, and thirst, and life, that it dearly cost. Yet, as Horticulturists, they persist in growing the *Boussoc*, *Clairgeau*, and *Duchesse*, to the exclusion of the *Comice*, *Beurre d'Anjou*, or *Winter Nelis*. They are fully aware that but two metals have ever served for coin. But they prove all things, and — holding fast to that which is good — do not let go of the poor or worthless. With the power to make the market what you would have it, wherever is the wonder that you have it what you make it!

It may appear a dream of madness — the substitution of the Spade, or Spading-Fork, for the Plough; yet calmly considered, why should not such a result come about in the not remote future? And even were tillage upon a large scale, to insist upon a retention of the more unwieldy implement, with its attendant train of brutes, it might yet be possible to demonstrate that the harvest from such increased surface would not neces-

sarily surpass the yield from a little land well tilled by the cunning hand and fitting tool. Men are so different — in physical force and natural aptitude,— that a task which might be little more than play for one, would almost overwhelm another. Yet France has shown the possibility of a nation becoming not only prosperous, but wealthy, from individual labor upon small allotments. Her people are reported to be mostly engaged in useful occupations, although her chief city has its full share of idlers who toil not, neither do they spin. But, from the English or American loafer, who will not dig, and is never so proud as when he begs; whose fixed creed is that the world owes him a living, and who takes good care, in collecting the debt, not to get beaten on the execution; France is measurably as happily exempt. Her farming is essentially gardening, as depicted by Mr. Gladstone; the earnest, popular, productive employment of a national life. When the young American can learn that contentment is better than riches; that enough is as good as a feast; he may find, to his surprise, that a subsistence, at least, is within his reach. In a manlier life than is offered by that incessant treadmill of the city, from boarding-house, over kerbstone or behind the counter; discontented and anxious because without sufficient occupation; and only too ready to pull down others who, howsoever willing, are unable to supply all with high wages for little work. The Earth, after all, is a bounteous mother; she welcomes all to her arms, and responds eagerly to their caresses. Forged notes and fraudulent shares are not of her increase. But she is ever ready to yield manifold to him whose steady industry places him above repining; whose desires, like his needs, are kept under control; and to whom

> "Better is a dinner of herbs, where love is, than a stalled ox and hatred therewith."

But why waste time and words in a feebler expression of what was so forcibly and tersely stated in a quaint rhyme of

GARDEN LORE.

> "Every child who has gardening tools
> "Should learn by heart these gardening rules.

"He who owns a gardening spade
"Should be able to dig the depth of its blade.
"He who owns a gardening rake
"Should know what to leave and what to take.
"He who owns a gardening hoe
"Must be sure how he means his strokes to go.
"While to shift a pot, or annex what you can
"A trowel's the tool for child, woman, or man.
"But he who owns a gardening fork
"May make it do all the other tools' work.
"'Twas the bird that sits in the Medlar tree
"Who sang these gardening songs to me."

Several Floral Exhibitions have been held, during the past year, that might well have been nipped in the bud. After the reporters for the press had prepared an exact and elaborate description of the crowns, crosses, broken columns, etc., etc., the remains of the deceased would be viewed, in their turn, and as a necessary portion of the show, by an indiscriminate throng, whose morbid curiosity must be appeased like any other insatiate appetite. The dictates of good taste, like the restraints of a wise frugality, are disregarded in this ostentatious rivalry upon the verge of an open grave. Of course, little heed is paid to the fitness of things, and a man who could not tell one flower from another, while living, is overwhelmed, in his coffin, by a profusion as heterogeneous as senseless. The laurel-wreath might well bind the brows of our illustrious Soldier when he, but yesterday as it were, once more stepped foot upon his native land.

"*Palmam qui meruit ferat.*"

But now, as erst, the value of a tribute lies in the rarity of its bestowal and the virtues of the recipient. Death works no miracle; howsoever much it may alleviate judgment:

"Be, to his faults, a little blind!
"Be, to his virtues, very kind."

But forget not, even in the blindness of friendship, as you render some things unto Cæsar, to reserve his own for God!

The watchful care of our *Janitor* has preserved Horticultural Hall from sensible depreciation. Its advantages as a place of pleasant resort are more widely appreciated, as its facilities of access and security of egress become familiar to the community. Yet the floor of the Hall of Pomona is not what it should be; to merit and command that constant use which is for your pecuniary interest; and a wise forethought would seem to suggest its thorough and perfect renovation. Suffering, in common with others, from the protracted depression in the value of Real Estate; we may well hope to share in the steady, if slow, improvement which awaits that form of investment. Nevertheless, there are imposed upon us artificial burdens;—heavily handicapping us in what should be an equal race;—the passive endurance of which, with deference to your better judgment, would appear to be no longer a virtue.

The General Statutes of the Commonwealth exempt from Taxation "the personal property of literary, benevolent, chari-"table, and scientific institutions incorporated within this Com-"monwealth, and the real estate belonging to such institutions, "occupied by them or their officers for the purposes for which "they were incorporated."

This WORCESTER COUNTY HORTICULTURAL SOCIETY was incorporated for the purpose, among others, of "advancing the "science of Horticulture." Yet, ever since the earliest acquisition of any tangible estate, the Assessors have doomed it in a sum amounting to one-fourth its annual income. The *General Court* terms Horticulture "*a Science*": the Assessors deny it!

The Statutes also exempt from taxation "Houses of religious "worship: * * but portions of such houses appropriated for "purposes other than religious worship, shall be taxed at the "value thereof to the owners of the houses."

But this Society, when attempting to lease its Hall, is confronted by those who would otherwise become tenants, with the notorious fact that they can hire, for a less sum, "portions of "houses of religious worship."

The Assessors ignore, or violate the law — peremptorily requiring all "portions of such houses appropriated for other than "religious worship to be taxed at the value thereof."

There have been religions, since the world was inhabited, for which countless myriads esteemed it a privilege to die in indescribable tortures. A waning faith is satisfied, in these latter days, with a profession that is popular because vapid, sonorous because hollow, and precious in proportion as it is cheap.

Your *Secretary* believes that every dollar in the community should bear its proportion of indispensable public burdens. And he would suggest that this Society bestir itself in aid of the recent movement for equal and just Taxation, to the end that, without any exception in favor of political or religious craft, strict equity may direct the levy of all sums necessary to maintain the peace and dignity of the Commonwealth.

All which is respectfully submitted by

EDWARD WINSLOW LINCOLN,

Secretary.

HORTICULTURAL HALL, Worcester, Mass.
November 5, A. D. 1879.

OFFICERS AND COMMITTEES

OF THE

Worcester County Horticultural Society,

FOR THE YEAR 1879–80.

PRESIDENT:

STEPHEN SALISBURY, Jr., of Worcester.

VICE PRESIDENTS:

STEPHEN SALISBURY, of Worcester; PHILIP L. MOEN, of Worcester; O. B. HADWEN, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

CHARLES E. BROOKS, of Worcester.

TRUSTEES (BY ELECTION):

Isaac Davis,	Worcester	Alexander H. Bullock,	Worcester
George E. Francis,	"	D. Waldo Lincoln,	"
James F. Allen,	"	Sylvanus Sears,	"
Henry Woodward,	"	Henry Phelps,	"
W. T. Merrifield,	"	Nathaniel Paine,	"
William T. Harlow,	"	Thomas A. Dawson,	"
H. M. Quimby,	"	J. Henry Hill,	"
Samuel A. Knox,	"	James Draper,	"
Francis H. Dewey,	"	Henry L. Parker,	"
Samuel Flagg,	"	William H. Earle,	"
Horatio Phelps,	"	William W. Cook,	"
C. E. Parker,	"	Calvin L. Hartshorn,	"
Thomas M. Lamb,	"	Joseph Lovell,	"
Frank J. Kinney,	"	Paul Whitin,	Whitinsville
John C. Newton,		George Cruickshanks,	"
Emory Banister,	"	Newell Wood,	Millbury
John D. Lovell,	"	F. M. Marble,	Grafton
Aug. N. Currier,	"	Joseph C. Lovell,	West Boylston
G. F. Hoar,	"		

STANDING COMMITTEES.

ON FINANCE:

Nathaniel Paine, Stephen Salisbury, Jr., Henry Phelps.

ON LIBRARY AND PUBLICATION:

Edward W. Lincoln, George E. Francis, William T. Harlow.

ON NOMENCLATURE:

James F. Allen, Henry Phelps, George E. Francis, O. B. Hadwen.

ON ARRANGEMENTS AND EXHIBITIONS,

O. B. Hadwen, James F. Allen, James Draper, George Cruickshanks, Henry Phelps, Newell Wood, Mrs. O. B. Hadwen, Mrs. T. L. Nelson, William H. Earle, William W. Cook, Charles E. Brooks, *President* Salisbury, and *Secretary* Lincoln.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1880.

The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

WORCESTER, MASS.:
NOYES, SNOW & COMPANY, PRINTERS.
1879.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

PRESIDENT — STEPHEN SALISBURY, JR.
O. B. HADWEN.
JAMES F. ALLEN.
GEORGE CRUIKSCHANKS.

JAMES DRAPER,
MRS. O. B. HADWEN,
NEWELL WOOD,
W. W. COOK,
HENRY PHELPS,
MRS. THOS. L. NELSON,
WILLIAM H. EARLE,
CHARLES E. BROOKS.

SECRETARY — EDWARD W. LINCOLN,
Nos. 5 Oak, and 18 Front, Streets.

COMMITTEES.

FLOWERS, &c.—Edward W. Lincoln, *Chairman;* Charles E. Parker, Henry L. Shumway, John Coulson, Charles Madaus.

FRUIT — Henry Phelps, *Chairman;* Newell Wood, Henry L. Parker, William H. Earle, Charles E. Brooks.

VEGETABLES — Henry Phelps, Edward W. Lincoln, James F. Allen.

NOMENCLATURE.—James F. Allen, Geo. E. Francis, Henry Phelps, O. B. Hadwen.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premiums must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small Fruits* must be entered in quart boxes or baskets, but may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

E. Competitors are expected to conform strictly to the conditions under which articles are invited. Evasion or violation of them may be reported to the TRUSTEES for future disqualification of the offender.

RULES AND REGULATIONS.

1. Exhibitions will be held on every Thursday afternoon, commencing January 1st, and terminating October 28th, A. D. 1880. The hours of exhibition will be between 2.30 and 4.30 o'clock. Articles offered for premium must be in the Hall by 2.30 o'clock, P. M., of the days of exhibition.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premiums shall have been grown by the competitors, *within the County of Worcester.*

3. After the articles are arranged they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove* them until the Exhibition is closed, when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits or Vegetables, is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Committees to *exclude frow exhibition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste. The Committee on Fruits, in making awards, will especially regard uniformity in size, symmetry of form, and beauty of color.

7. The Committees have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary, by giving seasonable notice thereof.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables, under different names, or exhibiting, as grown by himself, Flowers, Fruit or Vegetables grown by another, thereby violating the objects and rules of the Society, shall be debarred from competing for the Society's premiums until re-instated.

9. No Flowers, Plants, Fruits, or Vegetables, will be entitled to a premium unless they possess points of superiority; and the Committees are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them; nor shall any specimen or variety, for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

11. In all exhibitions of Cut Flowers, the use of foliage must be restricted to that of the varieties shown.

12. No member of any of the Committees for awarding premiums or gratuities shall, in any case, vote or decide respecting an award for which such member may be a competitor, or therein have an interest; but in such case such member shall temporarily vacate his place upon the Committee, the vacancy for the time being to be supplied by the remaining members of the Committee.

13. All premiums that are not claimed within three months after the close of the official year, shall be forfeited to the Society.

14. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

15. "Downing's Fruits of America," revised edition, will guide the Committee on Fruits in its decisions upon matters at issue.

☞ The *Chairmen* of Committees are authorized, by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

Fruits and Vegetables.

1880.

Thursday, January 1, 1880.

APPLES.—

For the best ten Tompkins King, three premiums. . $1.50, 1, .50
For the best ten Mother, three premiums . . . . . 1.50, 1, .50
For the best ten Fameuse . . . . . 1.50, 1, .50
For the best ten McClellan . . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00

PEARS.—

For the best ten Winter Nelis, three premiums. . . 1.50, 1, .50
For the best ten Vicar of Winkfield, three premiums, 1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00

Thursday, January 8.

APPLES.—

For the best ten Bailey's Sweet, three premiums . . $1.50, 1, .50
For the best ten Hubbardston Nonesuch, three premiums . . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00.

PEARS.—

For the best ten Beurre Langelier, three premiums . 1.50, 1, .50
For the best ten Josephine de Malines, three premiums . . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity . . . 1.00

Thursday, January 15,

APPLES.—

For the best ten Northern Spy, three premiums . . $1.50, 1, .50
For the best ten Cogswell, three premiums . . . . 1.50, 1, .50
For the best ten Baldwin . . . . . 1.50, 1, .50
For the best ten Old Nonesuch . . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, January 22.

APPLES.—

For the best ten R. I. Greening, three premiums . . $1.50, 1, .50
For the best ten Yellow Belleflower, three premiums, 1.50, 1, .50
For the best ten Leicester Sweet, three premiums . 1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00.

PEARS.—

For the best ten of any variety, gratuities . . . . . 1.50, 1, .50

Thursday, January 29.

APPLES.—

For the best ten Peck's Pleasant, three premiums . $1.50, 1, .50
For the best ten Westfield Seek no Further, three premiums . . . . . 1.50, 1, .50
For the best ten Ladies' Sweet, three premiums . . 1.50, 1, .50
For the best ten of any other variety, gratuity . . 1,00.

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, February 5.

APPLES.—

For the best ten Sutton Beauty, three premiums . . $1.50, 1, .50
For the best ten Tallman Sweet, three premiums . 1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00.

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, February 12.

APPLES.—

For the best ten Washington Royal, three premiums, $1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.50, 1, .50

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, February 19.

APPLES.—

For the best ten Stockwell Winter Sweet, three premiums . . . . . $1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00.

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, February 26.

APPLES.—

For the best ten Golden Russet, three premiums . . $1.50, 1, .50
For the best ten of any other variety, gratuity . . 1.00.

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, March 4.

APPLES.—

For the best ten of any variety, gratuities . . . . $1.50, 1, .50

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, March 11.

APPLES.—

For the best ten Roxbury Russet, three premiums . $1.50, 1, .50
For the best ten of any other variety, gratuities . . 1.50, 1, .50

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, March 18.

APPLES.—

For the best ten of any variety, gratuities . . . . $1.50, 1, .50

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, March 25.

APPLES.—

For the best ten Red Russet, three premiums . . . $1.50, 1, .50

PEARS.—

For the best ten of any variety, gratuities . . . . 1.50, 1, .50

Thursday, April 1.

For the best Fruit of any sort, gratuities . . . . . $1.50, 1, .50

VEGETABLES.—

For the best pair of Cucumbers, gratuities . . . . . $1, .50

For the best four heads of Lettuce, gratuities . . . . . 1, .50

Thursday, April 8.

RADISHES.—

For the best four bunches, gratuities . . . . . $1, .50

For the best kept Vegetables of any variety, gratuities . . 1, .50

Thursday, April 15.

RHUBARB.—

For the best ten stalks of, gratuities . . . . . $1, .50

For the best Vegetables of any variety, gratuity . . . . 1.

Thursday, April 22.

For the best Vegetables, gratuities . . . . . $1.50, 1, .50

For the best Fruit of any variety, gratuities 1.50, 1,

Thursday, April 29.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

Thursday, May 6.

ASPARAGUS.—

Best two bunches of twelve stalks each, three premiums . . . . . $1.50, 1, .50

Gratuities will be awarded for the best meritorious specimens of Fruit,

Thursday, May 13.

RHUBARB.—

Best twelve stalks, three premiums . . . . . $1.50, 1, .50

Gratuities will be awarded for the best meritorious specimens of Fruit.

Thursday, May 20.

ASPARAGUS.—

Best two bunches of twelve stalks each, three premiums . . . . . 1.50, 1, .50

Gratuities will be awarded for the best meritorious specimens of Fruit.

Thursday, May 27.

RADISHES.—

For the best twelve, three premiums . . . . . $1.50, 1, .50

Gratuities will be awarded for the best meritorious specimens of Fruit.

Thursday, June 3.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

Thursday, June 10.

Gratuities for Vegetables.

Thursday, June 17.

STRAWBERRIES.—

For the best quart of Strawberries, gratuities . . . $1.50, 1, .50

BEETS.—

For the best early Beets, ten specimens, gratuities, 1, .50

Gratuities for other Vegetables.

Thursday, June 24.

STRAWBERRIES.—

For the best quart of Downer's Prolific, three premiums, $1.50, 1, .50
For the best quart of Durand's Pioneer, three premiums . . . . . 1.50, 1, .50
For the best quart of Wilson, three premiums . . . 1.50, 1, .50
For the best quart of Charles Downing, three premiums . . . . . 1.50, 1, .50
For the best quart of Capt. Jack, three premiums . 1.50, 1, .50
For the best quart of Col. Cheney, three premiums . 1.50, 1, .50
For the best quart of Crescent Seedling, three premiums . . . . . 1.50, 1, .50
For the best quart of Cumberland Triumph, three premiums . . . . . 1.50, 1, .50
For the best quart of Duchess, three premiums . . 1.50, 1, .50
For the best quart of Sharpless, three premiums . . 1.50, 1, .50
For the best Fifty (50) berries of one variety (flat) gratuities 2.00, 1.50, 1.00

PEAS.—

For the best peck, gratuities . . . . . 1 50, 1, .50

Thursday, July 1.

STRAWBERRIES.—

For the best quart of Monarch of the West, three premiums . . . . . 1.50, 1, .50
For the best quart of Jucunda, three premiums . . 1.50, 1, .50
For the best quart of Triomphe de Gand, three premiums . . . . . 1.50, 1, .50
For the best quart of Great American, three premiums, 1.50, 1, .50
For the best quart of Durand's Beauty, three premiums . . . . . 1.50, 1, .50
For the best quart of any other variety, gratuities . 1, .50
For the best fifty berries of one variety. flat. gratuities 2.00, 1.50. 1.00

PEAS.—

For the best peck, gratuities. . . . . 1.50, 1, .50

Thursday, July 8.

RASPBERRIES—RED.—

For the best two quarts of Brandywine, three premiums . . . . . $1.50, 1, .50

BLACKCAPS.—

For the best two quarts of Davison's Thornless, three premiums . . . . . 1.50, 1, .50

For the best two quarts of Doolittle, three premiums, 1.50, 1, .50

CURRANTS.—

For the best two quarts Red, gratuities . . . . . 1.50, 1, .50

For the best two quarts White, gratuities . . . . . 1.50, 1, .50

CHERRIES.—

For the best two quarts, any variety, gratuities . . 1.50, 1, .50

STRAWBERRIES.—

For the best two quarts, any variety, gratuities . 1.50, 1, .50

BEANS.—

For the best peck of Snap Beans, gratuities . . . . . 1, .50

PEAS.—

For the best peck, of any variety, gratuities, . . . 1, .50

TOMATOES.—

For the best ten specimens, gratuities, ... 1, .50

Thursday, July 15.

CURRANTS.—

For the best two quarts of La Versaillaise, three premiums . . . . . $1.50, 1, .50

For the best two quarts of Red Dutch, three premiums . . . . . 1.50, 1, .50

For the best two quarts of White Grape, three premiums . . . . . 1.50, 1, .50

For the best two quarts of White Gondouin, three premiums . . . . . 1.50, 1, .50

For the best two quarts of any other variety, gratuities . . . . . 1.50, 1, .50

STRAWBERRIES.—

For the best quart of Strawberries, of any variety, gratuities . . . . . 1, .50

RASPBERRIES.—

For the best two quarts of Brinckle's Orange, three premiums . . . . . 1.50, 1, .50

For the best two quarts of Northumberland, three premiums . . . . . 1.50, 1, .50

For the best two quarts of Hudson River Antwerp, three premiums . . . . . 1.50, 1, .50

For the best two quarts of Clarke, three premiums . 1.50, 1, .50

For the best two quarts of Franconia, three premiums . . . . . 1.50, 1, .50

For the best two quarts of Hornet, three premiums, 1.50, 1, .50

For the best two quarts of Knevett's Giant, three premiums . . . . . 1.50, 1, .50

For the best two quarts of Herstine, three premiums, 1.50, 1, .50

For the best two quarts of Cuthbert, three premiums, 1.50, 1, .50

BLACKCAPS.—

For the best two quarts of Mammoth Cluster, three premiums . . . . . 1.50, 1, .50

For the best two quarts of Gregg, three premiums . 1.50, 1, .50

PEAS.—

For the best peck, gratuities . . . . . 1, .50

POTATOES.—

For the best peck, gratuities . . . . . 1, .50

Thursday, July 22.

RASPBERRIES.—

For the best two quarts of any variety, gratuities . $1.50, 1, .50

BLACKBERRIES.—

For the best two quarts of Snyder, three premiums, 1.50, 1, .50

For the best two quarts of Kittatinny, three premiums, 1.50, 1, .50

For the best two quarts of Wachusett, three premiums, 1.50, 1, .50

For the best two quarts of any other variety, gratuities, ... 1.50, 1, .50

VEGETABLES.—

For the best ten ears of Sweet Corn, gratuities, . . 1, .50
For the best four Squashes, gratuities, ... 1, .50
For the best four Cabbages, gratuities, ... 1, .50

Thursday, July 29.

PEARS.—

For the best ten specimens of Doyenne d' Ete', three premiums, ... $1.50, 1, .50

TOMATOES.—

For the best ten specimens of any variety, gratuities, 1.50, 1, .50

Thursday, August 5.

APPLES.—

For the best ten specimens of any variety, gratuities, 1.50, 1, .50

PEARS.—

For the best ten specimens of Bloodgood, three premiums, ... 1.50, 1, .50

Thursday, August 12.

APPLES.—

For the best specimens of any variety, gratuities, . 1.50, 1, .50

PEARS.—

For the best ten specimens of Beurre Giffard, three premiums, ... 1.50, 1, .50
For the best ten specimens of Brandywine, three premiums, ... 1.50, 1, .50

CORN.—

For the best ten ears Sweet, three premiums, . . 1.50, 1, .50

Thursday, August 19.

APPLES.—

For the best ten specimens of Early Harvest, three premiums, ... $1.50, 1, .50

For the best ten specimens of Red Astrachan, three premiums, ... 1.50, 1, .50

PEARS.—

For the best ten specimens of Dearborn's Seedling, three premiums, ... 1.50, 1, .50

For the best ten specimens of Osband's Summer, three premiums, ... 1.50, 1, .50

POTATOES.—

For the best peck, gratuities, ... 1, .50

Thursday, August 26.

APPLES.—

For the best ten specimens of Early Sweet Bough, three premiums, ... $1.50, 1, .50

For the best ten specimens of Duchess of Oldenburg, three premiums, ... 1.50, 1, .50

PEARS.—

For the best ten specimens of Clapp's Favorite, three premiums, ... 1.50, 1, .50

For the best ten specimens of Tyson, three premiums 1.50, 1, .50

PEACHES.—

For the best ten specimens of any variety, gratuities, 1.50, 1, .50

PLUMS.—

A gratuity will be given for the best collection.

Thursday, September 2.

APPLES.—

For the best ten specimens of Williams's Early Red, two premiums . . . . . $1.00, .50

PEARS.—

For the best ten specimens of Clapp's Favorite, two premiums, ... 1,50, 1.00

For the best ten specimens of Rostiezer, two premiums, ... 1.50, 1.00

For the best ten specimens of any other variety, gratuities . . . . . 1.00, .50

PEACHES.—

For the best ten specimens of any variety, gratuities, 1.00, .50

PLUMS.—

For the best ten specimens of Green Gage, two premiums, ... 1.00, .50

For the best ten specimens of Jefferson, two premiums, ... 1.00, .50

For the best ten specimens of Lombard, two premiums, ... 1.00, .50

For the best ten specimens of Washington, two premiums, ... 1.00, .50

Thursday, September 9.

APPLES.—

For the best ten specimens of Williams's Early Red, two premiums . . . . . 1.00, .50

For the best ten specimens of Early Sweet Bough, two premiums, ... 1.00, .50

For the best twenty-four specimens of Crab Apples, of one variety, gratuities . . . . . 1.00, .50

PLUMS.—

A Gratuity will be given for the best collection.

PEARS.—

For the best ten specimens of Belle Lucrative, two premiums, ... 1.00, .50

For the best ten specimens of Bartlett, two premiums, 1.00, .50

For the best ten specimens of St. Ghislain, two premiums, ... 1.00, .50

For the best ten specimens of any other variety, gratuities, ... 1.00, .50

PEACHES.—

For the best ten specimens of Cooledge's Favorite, two premiums, ... 1.00, .50

For the best ten specimens of George Fourth, two premiums, ... 1.00, .50

VEGETABLES.—

For the best four varieties of Vegetables, gratuities, 2.00, 1.00

Thursday, September 16.

APPLES.—

For the best ten specimens of Foundling, two premiums, $1.00, .50

For the best ten specimens of Golden Sweet, two premiums . . . . . 1.00, .50

For the best ten specimens of Gravenstein, two premiums . . . . . 1.00, .50

For the best ten specimens of Porter, two premiums . 1.00, .50

Thursday, September 23.

PEARS.—

For the best ten specimens of Flemish Beauty, two premiums . . . . . $1.00, .50

For the best ten specimens of Paradis d'Automne, two premiums . . . . . 1.00, .50

For the best ten specimens of Washington, two premiums . . . . . 1.00, .50

For the best ten specimens of Earle's Bergamot, two premiums . . . . . 1.00, .50

For the best ten specimens of Doyenne Boussoc, two premiums . . . . . 1.00, .50

PEACHES.—

For the best ten specimens, gratuities . . . . . 1.00, .50

GRAPES.—

For the best three clusters of Moore's Early, two premiums . . . . . 1.00, .50

For the best three clusters of Hartford, two premiums, 1.00, .50

For the best three clusters of Worden, two premiums . 1.00, .50

For the best two clusters of Hot-House Grapes, gratuities 3.00, 2.00, 1.00

PEACHES.—

For the best ten Early Crawford, two premiums . . . . 1.00, .50
For the best ten Foster, two premiums . . . . . 1.00, .50
For the best ten Oldmixon, two premiums . . . . . 1.00, .50

Thursday, September 30.

APPLES.—

For the best ten specimens of Holden Pippin, two premiums . . . . . 1.00, .50
For the best ten specimens of Lyscom, two premiums . 1.00, .50
For the best ten specimens of Twenty Ounce, two premiums . . . . . 1.00, .50

PEARS.—

For the best ten specimens of Beurré Hardy, two premiums . . . . . 1.00, .50
For the best ten specimens of Louise Bonne de Jersey, two premiums . . . . . 1.00, .50
For the best ten specimens of Seckel, two premiums . 1.00, .50
For the best ten specimens of St. Michel Archange, two premiums . . . . . 1.00, .50
For the best ten specimens of Washington, two premiums . . . . . 1.00, .50

GRAPES.—

For the best three clusters of Concord, two premiums . 1.00, .50
For the best three clusters of Agawam, two premiums, 1.00, .50
For the best three clusters of Delaware, two premiums, 1.00, .50

PEACHES.—

For the best ten specimens of any variety, gratuities . 1.00, .50

VEGETABLES.—

For the best four varieties, gratuities 1.50, 1.00

Thursday, October 7.

APPLES.—

For the best ten specimens of Garden Royal, two premiums . . . . . $1.00, .50
For the best ten specimens of Maiden's Blush, two premiums . . . . . 1.00, .50

For the best ten specimens of Washington Strawberry, two premiums . . . . . 1.00, .50
For the best ten specimens of any other variety, gratuities . . . . . 1.00, .50

PEARS.—

For the best ten specimens of Beurre Bosc, two premiums . . . . . 1.00, .50
For the best ten specimens of Beurre Clairgeau, two premiums . . . . . 1.00. .50
For the best ten specimens of Sheldon, two premiums, 1.00, .50
For the best ten specimens of Doyenne du Comice, two premiums . . . . . 1.00, .50
For the best ten specimens of any other variety, gratuities . . . . . 1.00, .50

GRAPES.—

For the best three clusters of Salem, two premiums . . 1.00, .50
For the best three clusters of Brighton, two premiums, 1.00, .50
For the best three clusters of Martha, two premiums . 1.00, .50
For the best three varieties, two clusters each, of Foreign Grapes, gratuities 3.00, 2.00, 1.00

VEGETABLES.—

For the best four varieties, gratuities 1.50, 1.00

Thursday, October 14.

APPLES.—

For the best ten specimens of any variety, gratuities . $1.00, .50

PEARS.—

For the best ten specimens of Beurre Superfin, two premiums . . . . . 1.00, .50
For the best ten specimens of Dix, two premiums . . . 1.00, .50
For the best ten specimens of Duchesse, two premiums, 1.00, .50
For the best ten specimens of Durandeau, two premiums . . . . . 1.00, .50
For the best ten specimens of Marie Louise, two premiums . . . . . 1.00, .50
For the best ten specimens of Onondaga, two premiums, 1.00, .50

GRAPES.—

For the best three clusters of any variety, gratuities . . 1.50, .50

QUINCES.—

For the best ten specimens of any variety, gratuities, ... 3.00, 2.00, 1.00

Thursday, October 21.

APPLES.—

For the best ten specimens of Mother, two premiums . $1.00, .50
For the best ten specimens of McClellan, two premiums, 1.00, .50
For the best ten specimens of Sutton Beauty, two premiums . . . . . 1.00, .50
For the best ten specimens of Baldwin, two premiums . 1.00, .50

PEARS.—

For the best ten specimens of Beurre d'Anjou, two premiums . . . . . 1.00, .50
For the best ten specimens of Beurre Diel, two premiums . . . . . 1.00, .50
For the best ten specimens of Goodale, two premiums . 1.00, .50
For the best ten specimens of Howell, two premiums . 1.00, .50
For the best ten specimens of Urbaniste, two premiums, 1.00, .50

VEGETABLES.—

For the best four varieties, gratuities . . . . . 1.50, .50

Thursday, October 28.

APPLES.—

For the best ten specimens of any variety, gratuities, ... 1.50, 1.00, .50

PEARS.—

For the best ten specimens of Beurre Langelier, two premiums . . . . . 1.00, .50

For the best ten specimens of Glou Morceau, two premiums . . . . . 1.00, .50

For the best ten specimens of Lawrence, two premiums, 1.00, .50

For the best ten specimens of Mount Vernon, two premiums . . . . . 1.00, .50

For the best ten specimens of Dana's Hovey, two premiums . . . . . 1.00. .50

VEGETABLES.—

For the best four varieties, gratuities 2.00, 1.00

FLOWERS, PLANTS, ETC.

1880.

Thursday, February 5.

PRIMULA SINENSIS.—

For the best three plants in bloom, two premiums, $2.00 1.00

For the best single plant in bloom, two premiums, 1.00 .50

PARLOR BOUQUET.—(From Florists.)

For the best, three premiums, ... 3.00, 2.00, 1.00

Thursday, March 4.

HYACINTHS.—

For the best five plants in bloom, three premiums, $3.00, 2.00, 1.00

For the best single plant in bloom, two premiums, 1.00, .50

BASKET.—(From Florists.)

For the best arranged, three premiums, ... 3.00, 2.00, 1.00

Thursday, March 18.

AZALEA INDICA.—

For the best three plants in bloom, two premiums, ... $3.00, 2.00

For the best single plant in bloom, two premiums, ... 1.00, .50

CYCLAMENS.—

For the best three in bloom, two premiums, . . 2.00, 1.00

For the best single plant in bloom, two premiums, ... 1.00, .50

RICHARDIA ÆTHIOPICA.—

Best plant in bloom, two premiums, ... 2.00, 1.00

Thursday, April 15.

GREENHOUSE PLANTS.—

For the best three in bloom, two premiums, . $3.00, 2.00

For the best single plant in bloom, two premiums, ... 2.00, 1.00

PANSIES.—

For the best display, three premiums, ... 3.00, 2.00, 1.00

FLOWERS.—

For the best display of, from hardy bulbs, . . three premiums, ... 3.00, 2 00, 1.00

Thursday, May 13.

TULIPS, EARLY.—(Open culture.)

For the best display, two premiums, ... $2.00, 1,00

HYACINTHS.—(Open culture.)

For the best display, two premiums, ... 2.00, 1.00

Thursday, June 3.

CUT FLOWERS.—(From hardy plants and shrubs.)

For the best display, open culture, three premiums, ... $3.00, 2.00, 1.00

NATIVE PLANTS AND FLOWERS.—

For the best display, three premiums, ... 2.00, 1.00, .50

RHODODENDRONS.—

For the best display, three premiums, ... 3.00, 2.00, 1.00

AZALEAS (Ghent)—

For the best display, three premiums, ... 3.00, 2.00, 1.00

TULIPS, (Late).—

For the best display, two premiums, ... 2.00, 1.00

Thursday, June 17.

ROSES.—

For the best twelve blooms or clusters of distinct named varieties of H. P. Roses, out-door culture, two premiums, ...	$3.00, 2.00
For the best six blooms or clusters of distinct named varieties of H. P. Roses, out-door culture, two premiums, ...	2.00, 1.00
For the best Stand of H. P. Roses, three premiums, ...	3.00, 2.00, 1.00
For the best Stand of Roses, three premiums, .	3.00, 2.00, 1.00
For the best Basket, Dish, or Design of Roses, three premiums, ...	3.00, 2,00, 1.00

CUT FLOWERS.—

For the best Stand, two premiums, ...	2.00, 1.00
For the best Basket or Dish, wholly of biennials or perennials, two premiums, ...	2.00, 1.00
For the best Vase, two premiums, ...	2.00, 1.00

AQUILEGIA.—

For the best display of, two premiums, ...	2.00, 1.00

PÆONIA.—

For the best display of, two premiums, ...	2.00, 1.00

Thursday, July 1.

HAND BOUQUET.—

For the best (Florist), two premiums, . . .	$2.00, 1.00
For the best (Amateur), two premiums . . .	2.00, 1.00

FLORAL DESIGN.—

For the best (Florist), three premiums, . . .	3.00, 2.00, 1.00
For the best (Amateur), three premiums, . .	3.00, 2.00, 1.00

VASE.—

For the best (Florist), three premiums, ...	3.00, 2.00, 1.00
For the best (Amateur), three premiums, . . .	3.00, 2.00, 1.00

Thursday, July 8.

BASKET.—

For the best arranged, (Florist), three premiums, ... $3.00, 2.00, 1.00

For the best arranged, (Amateur), three premiums, ... 3.00, 2.00, 1.00

CUT FLOWERS.—

For the best Stand, three premiums, ... 3.00, 2.00, 1.00

CLEMATIS.—

For the best display, three premiums, ... 3.00, 2.00, 1.00

Thursday, July 15.

HOLLYHOCKS.—

For the best six, distinct, two premiums, . . . $2.00, 1.00

ZONALE GERANIUMS.—

For the best Stand, two premiums, ... 2.00, 1.00

FLORAL DESIGN.—

For the best (Florist), two premiums, ... 2.00, 1.00

For the best (Amateur), two premiums, . . . 2.00, 1.00

Thursday, July 22.

GREENHOUSE FLOWERS.—

For the best twenty blooms or clusters from Greenhouse or Bedding Plants, three premiums, ... $3.00, 2.00, 1.00

CUT FLOWERS.—

For the best Stand, of distinct varieties, three premiums, ... 3.00, 2.00, 1.00

Thursday, July 29.

FLOWERS grown from Seed.—

For the best Stand, two premiums, ... $2.00. 1.00

BASKET.—

For the best arranged (Amateur), three premiums, ... 3.00, 2.00, 1.00

PETUNIAS.—

For the best Stand, three premiums, ... 3.00, 2.00, 1.00

Thursday, August 5.

GLADIOLUS.—

For the best ten named varieties, one spike each, three premiums, ... 3.00, 2.00, 100

PARLOR BOUQUET.—

For the best (Amateur), three premiums, . . . 3.00, 2.00, 1.00

CUT FLOWERS, grown from Seed.—

For the best stand of distinct varieties, three premiums 3.00, 2.00, 1.00

Thursday, August 12.

PERENNIAL PHLOXES.—

For the best display, two premiums, ... $2.00, 1.00

CUT FLOWERS.—

For the best twenty blooms or clusters of distinct varieties, two premiums, ... 2.00, 1.00

For the best Stand of distinct varieties, three premiums, ... 3.00, 2.00, 1.00

Thursday. August 19.

GLADIOLUS.—

For the best twenty distinct varieties, one spike each, three premiums, ... $3.00, 2.00, 1.00

LILIES.—

For the best display, two premiums 2.00, 1.00

PINKS.—

For the best stand, two premiums, ... 2.00, 1.00

CUT FLOWERS.—

For the best collection grown from seed, annual, biennial, and all herbaceous, two premiums., 2.00, 1.00

Thursday, August 26.

ASTERS.—

For the best stand, three premiums, ... $3.00, 2.00, 1.00

POMPON ASTERS.—

For the best stand, three in a bottle, three premiums, ... 3.00, 2.00, 1.00

PHLOX DRUMMONDII.—

For the best stand, two premiums, ... 2.00, 1.00

CUT FLOWERS.—

For the best stand of, distinct varieties, three premiums, ... 3.00, 2.00, 1.00

NATIVE FLOWERS.—

For the best collection, three premiums, . . 2.00, 1.00, .50

Thursday, September 9.

VERBENAS.—

For the best display, three premiums, ... $3.00, 2.00, 1.00

FLORAL DESIGN, for Parlor or Table.—

For the best (Florist), three premiums, ... 3.00, 2.00, 1.00

For the best (Amateur), three premiums, . . . 3 00, 2.00, 1.00

GLADIOLUS.—

For the best stand, three premiums, ... 3.00, 2.00, 1 00

Thursday, September 16.

BASKET.—Of annuals solely.

For the best (Florist) three premiums, . . . $3.00, 2.00, 1.00

For the best (Amateur), three premiums, . . . 3.00, 2.00, 1.00

DAHLIAS.—

For the best display, two premiums, ... 2.00, 1.00

Thursday, September 23.

PANSIES.—

For the best display, three premiums, ... $3.00, 2.00, 1.00

PHLOX, Late.—

For the best display, three premiums, ... 3.00, 2.00, 1.00

Thursday, September 30.

FLOWERS.—

For the best twenty blooms or clusters of distinct varieties, three premiums, ... $3.00, 2.00, 1.00

ASTERS.—

For the best stand, three premiums, ... 3.00, 2.00, 1.00

Thursday, October 9.

FLORAL DESIGN.—

For the best (Florist), two premiums, ... $3.00, 2.00

For the best (Amateur), two premiums . . . 3.00, 2.00

Thursday, October 14.

FLOWERS.—

For the best collection of single blooms or clusters, distinct varieties, one stand, three premiums, ... $3.00, 2.00, 1.00

Thursday, October 21.

BASKET OR DISH.—

For the best (Florist), three premiums, . . . $3.00, 2.00, 1.00

For the best (Amateur), three premiums, . . . 3.00, 2.00, 1.00

Thursday, October 28.

PARLOR BOUQUET.—

For the best, three premiums, ... $3.00, 2.00, 1.00

FERNERIES.—

Which have been planted and growing at least two months, five premiums, . . $5.00, 4.00, 3.00, 2.00, 1.00

HANGING BASKET.—

For the best, grown at least one month, three premiums, ... 3.00, 2.00, 1.00

WINDOW GARDEN, Stand or Basket.—

For the best, grown at least two months, four premiums, ... $4.00, 3.00, 2.00, 1.00

NATIVE PLANTS.—

For the best arrangement of, two premiums, . 2.00, 1.00

PARLOR FERN.—

For the best, three premiums, ... 2.00, 1.00, .50

TRANSACTIONS

OF THE

WORCESTER COUNTY HORTICULTURAL SOCIETY,

FOR THE YEAR, 1880.

COMPRISING ESSAYS AND REMARKS,

AT STATED WEEKLY MEETINGS;

ALSO, THE

ANNUAL REPORTS OF THE LIBRARIAN,

AND OF THE

SECRETARY.

Worcester;
PRESS OF CHAS. HAMILTON,
311 MAIN STREET.
1880.

NOTE.

The Committee on Publication regret that so few of the Essayists were enabled to furnish the manuscript of their remarks, as delivered. In a few instances, it is true, none had been prepared. The reports, in the *Spy* and *Gazette*, were so full and accurate, however, that there is less cause to deplore such deficiency.

Beyond which the Committee doubt if the Society has ever issued a volume equally fraught with instruction. Facts are clearly stated and advice is plainly given. It rests with the reader to profit by the unusual opportunity.

For the Committee.

EDWARD W. LINCOLN,

Chairman.

HALL OF FLORA,
DECEMBER, A. D. 1880.

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WORCESTER COUNTY
HORTICULTURAL SOCIETY.

A. D. 1880.

FIRST MEETING, JANUARY 29TH, P. M.

SUBJECT: EXHIBITING AND JUDGING FRUITS AND FLOWERS.

President SALISBURY took the chair at 3 o'clock.

Hon. J. F. C. HYDE, of Newton, introduced the subject, answering questions freely during the course of his remarks. Alluding to fruits and flowers he spoke of the importance of exhibiting, and considered the policy of growing, but not exhibiting, a bad one. He does not believe in going to exhibitions and saying, "I can beat that at home," as it seldom proves true. The exhibitions, he considered, benefit the public, and especially the grower, by stimulating him to a renewed effort with better success. In relation to judging, he said it was impossible to please everybody, and judges at a horticultural or agricultural exhibition must expect abuse, as must all others who take any prominent position. He urged the importance of selecting disinterested, competent persons. He believed that prominent officers of a society should not compete for premiums, as they should not leave the door open so that any criticism can be made, as people will say, "Oh, yes; you will award a premium to the president, but never to me." Then care should be taken to select proper persons as the judges, and not to get on those who know nothing about that which is to be judged. The utmost impartiality should be used, and a good plan is, not to have the names of the exhibitors appear; as there is sometimes a tendency to strain a point, and give a prize to a friend. It may not always be practicable, but on the whole, he thought it would be preferable. Societies should have their own dishes, plates, vases and bottles for exhibition purposes, as it improves the exhibition's appearance. The varieties should also be classified. Then a standard, embracing color, size, quality

and productiveness should be established, and these elements should be considered in making the awards; every specimen being examined, and the slightest defects, such as a bruise, a wormhole, a lack of stem, or a variety not true to name, noted carefully, that nothing which does not properly belong should be considered. He cited cases where whole stands have been disqualified for slight imperfections, but he believed in the adoption of a rule and living up to it, without the slightest deviation. Deviating from an established rule always makes trouble. One thing that ought to be done is the exclusion of poor specimens by those who make up the exhibition, no matter by whom they are offered, as it injures an exhibition by lowering the standard, and leads to the depreciation of the exhibits. He considers it a difficult thing to do, but one which should be done, although it is beset with difficulties. The result of admitting everything must lower the standard, and expelling poor specimens, although for a time it decreases the size of your exhibition, will, eventually, be most beneficial, and the general standard greatly increased. In regard to judging floral designs he said he was pretty hard on them, and thought a committee on them a difficult place to put a person, and he believed in putting on a lady or two who would say *no* much more gently than a man. Baskets and bouquets he believes in, not, however, those made like a great cauliflower and as stiff; and he believed their exhibition should be encouraged in all ways. In judging them he would exclude the owner's names and get an impartial committee. A difficulty is encountered, as the style exposes the owner when he exhibits at successive exhibitions. He spoke of strawberries as coming under the same rule for exhibition, and would have the judges consider quality rather than size, as more should depend upon this feature. Roses he is much interested in, and the hybrid perpetuals, he said, would give you roses from June to frost, with proper attention. Nothing can equal them in all respects, give as much satisfaction to the eye, or awaken more enthusiasm among the growers and the public. It furnishes abundant means of enjoyment, the roses are not expensive, they need but little care, for by treating with tobacco water or whale oil soap for a fortnight, you secure strong plants, elegant flowers and luxuriant foliage. The whale oil soap should be used from a third to a half pound to a pail of water; and the tobacco soap should not be used as strong. Nothing but lightning and the fingers will keep the rose bugs away, and they should be killed by shaking into water with a little kerosene on top. Last year they were unusually thick, but may not prove as troublesome another year. In speaking of Pears, the Beurre

Clairgeau he spoke of as an excellent fruit to show, but, like the Wilson-Albany strawberry, not worth the growing. For home use a dozen varieties of pears should be grown. First, should be the Bartlett for size, quality and productiveness, and second, the Beurre d' Anjou; but beyond, the list should be made up according to the qualities of the soil on which it is to be grown. People are wofully misled by the appearance of fruit on the stands. Bartletts and Beurre d' Anjous should be grown by professionals and amateurs, but beyond this the Society should determine what can be grown with the best results, all things considered. He spoke of the process of keeping fruit by ammonia, as shown on North street, Boston, where Beurre d' Anjous have been kept a month longer than usual, and sold for $6 a bushel, instead of $1.50 as when sold at the usual time. The process by which the ammonia is condensed and the cold air forced through the building was described, the cost being 12½ cents per bushel per month. In exhibiting he believed that the purpose for which these specimens are intended should be considered, the awards not being controlled by size or quality wholly, but by all requisites. The standard should always be a high one, although seldom reached. In judging pears, he did not believe in awarding the premiums to those which weigh the most, unless, as seldom happens, there is no other difference.

In judging Vegetables he said the rule should be,—if the larger specimen of mangolds was symmetrical and round, it should take the prize, but if the offer is for table beets, the size should be only medium; it should be smooth, free from small roots, &c. In squashes size should not govern, but quality. A mammoth may deserve a gratuity to pay for lugging it in.

One good object in exhibitions is the elevation of the standard and the bringing up the public to a higher standard.

President Salisbury expressed the thanks of the Society for Mr. Hyde's interesting remarks, and they were formally voted.

SECOND MEETING, FEBRUARY 5TH, P. M.

Vice-President HADWEN in the chair.

SUBJECT: MANURES AND FERTILIZERS.

BY JOHN B. MOORE OF CONCORD.

The object sought to be obtained when manure is applied to land, is to furnish the requisite plant food for the crop then growing, or to be grown. The only other effects produced would be the mechanical subdivision and lightening up of the soil by which the air and water from the rains could more easily penetrate the soil and render the plant food therein soluble, and also the shade produced by the mulching of the surface roots, which is often beneficial to plant growth. The difference between good and poor land is in the amount of available plant food contained in the foot or two of the surface soil and its mechanical condition of fineness. Suppose two lots of sandy loam with the same exposure; the ability of each lot to produce a crop would depend upon the amount of soluble plant food contained in the soil, and also upon the fineness of the particles of the soil itself; the finer the better, because the roots can penetrate better in the fine than in the coarse, and it will retain the water better and hold the plant by its roots firmer. The same rule would apply also to any other soils.

Manures and fertilizers, when subjected to a chemical analysis, are divided into a number of different elements that are found necessary for plant growth. About the only ones that we need to concern ourselves about are nitrogen, or ammonia, phosphoric acid, and potash. Lime, magnesia and other articles are very useful in some instances, but are usually found in sufficient abundance in our soils to supply all the want of crops. Therefore the three first named articles are what we must supply. Stable manure is to-day the great source of supply for fertilization of the soil. It is, perhaps, the nearest to a perfect manure of anything that we have, although its actual worth varies very much,—that made from animals fed upon good hay and grain being much more valuable than that from poor hay, and that from stall-fed animals being still more so than that from milch cows; and the excrements

from the human race, the sheep and hog, being more valuable than that from the stable, cord for cord.

It is economy to save everything from these sources. But in the practical operations on a farm, or garden, we find that we do not have enough manure, after saving as much from these sources as we can to grow our crops. Certainly I do not find enough, and have to buy. A cheap and efficient fertilizer is the great want of the farmer in the New England States to-day. How shall we get it?

From the investigations of M. Ville, an eminent chemist in the employ of the government of France (and it has been verified somewhat by other experimenters), it appears that the different varieties of plants require the elements of plant growth in different degrees or quantities. One wants ammonia in large quantities, while some other species require but little. Another wants phosphoric acid, or potash in excess, while another wants but a very small quantity. Almost every variety of plant that we cultivate wants one of those three elements in excess of all others. While stable manure may, and does furnish all these ingredients required in plant growth to a certain extent, there may be and usually is a deficiency of ammonia required by one species of plants, or of phosphoric acid, or of potash required by others. Admitting these propositions to be true, and I may say that my experience confirms them, then the proper combination of the elements of plant growth becomes of great importance in the economical production of crops.

This would bring us to the consideration of other fertilizers and sources of plant food; and first those that are termed commercial fertilizers. They are prepared articles of different degrees of value, such as the super-phosphates of lime; refuse of slaughter-houses, composed of meat, blood, bone and offal, and when dried and ground, are sometimes called animal meal, ground bone, and various other articles. They are all good, but their actual value to the farmer or gardener depends upon three things, namely,—how much they cost, how thoroughly they are dissolved in the manufacture, and how much they are extended or adulterated. There are many other articles that are valuable for fertilizing purposes—such as Stassfurt potash salts, refuse of fish, leached and unleached ashes, horn shavings, and Peruvian guano. The last is very valuable if not adulterated, and in what is called the rectified form has given good satisfaction to those that have used it. In fact, these last named all have their value, which can be estimated better than when they are mixed in the manufactured article.

What is the best method of fertilizing a piece of land to pro-

duce a full crop? This is a hard question to answer, and while I do not expect many of you to agree with me in my conclusions, I shall try and answer as well as I can from my standpoint: First, a dressing of stable manure, the quantity must depend upon the crop to be grown; then apply the other one or two elements that the crop to be grown requires, in larger quantities than will be furnished by the stable manure. I can easily imagine that some good conservative farmer will say—Give my land a good dressing of barnyard manure and I will risk my corn, I don't want any of your ammonia or potash. Well! I have said that just what he is willing to risk his corn on is a first rate thing to start with. But then there are nine chances out of ten that the same farmer has really given them the additional elements that I have named. Let us see. He has composted the droppings from his hen house, and put a quantity of that in the hill when he planted his corn. Well! that is only to give the corn a good start. But he has added ammonia in which hen droppings are particularly rich, the very thing to give the corn a start, and he has put that in at the right time, and the right place, and where it will do the most good. Then the corn comes up, and at the first or second hoeing he goes over the field again and puts a handful of wood ashes about each hill, because he says that it does make it grow, and also keeps off the worms; and then he likes to see it look that dark green color, which always denotes vigor and health. There is the other element, potash; and these are the very two elements that Indian corn wants in larger proportions than are found in stable manure. There may be instances where neither ammonia, bone or potash, would do any particular good; for instance, some of the river bottom land in the west. And here let me again say that the richness of the land does not depend upon the amount of manure applied entirely, but upon the amount of soluble plant food in the soil.

I have said that the value of manufactured fertilizers may depend very largely upon how well they are dissolved. Ground bone, although pure, will be so long in decomposing, unless dissolved with acid or broken down with wood ashes, as to almost discourage one in its use, while if it has been thoroughly dissolved with sulphuric acid it is immediately available, and very valuable for plant food. The substitutes for bone, which are used to a large extent in the manufacture of fertilizers, such as the South Carolina deposits and the Canada apatite, when thoroughly dissolved, the phosphoric acid which they contain is just as good as it is from bone itself; but if not dissolved, and in its natural state, it is worth no more than so much sand, while from pure bone undissolved, plants would get the benefit of it after a few years.

Dried and finely ground meat, bone, blood and offal are not soluble until they have undergone decomposition, or have been broken down with some acid. The same may be said of fish refuse and various other articles, although they decompose readily by composting.

All cereals want ammonia as the leading element; root crops, phosphoric acid and potash; clover, phosphoric acid and potash; and, although the analysis of clover shows a very large amount of nitrogen or ammonia, the application of that to the soil for clover does not benefit that crop to any great extent.

It has been said that a chemist can make an artificial soil containing all the elements of plant growth, and that soil may still be sterile. Its potash may be in feldspar rock, its phosphoric acid in Canada apatite, its ammonia in some other form and all of them locked up in insoluble combinations. And an analysis of it by a chemist with his powerful acids, will show all of these articles in abundance, and still not a particle available for plant food. And here another very proper inquiry comes in, and that is why you cannot analyze the soil itself and find out its wants so as to doctor it understandingly. The answer is that the chemist's acid will truly discover all that there is in the sample tested, and show an abundance of plant food when there is really nothing available. It is not sufficient that the soil contain all that is necessary to plant growth but it must be able to give them to the plant in due quantity and proportion.

Dr. Nichols estimates that a cord of barnyard manure weighs 3000 pounds, divided as follows: Water, 2456 pounds; sand, 138 pounds; carbonaceous matter of no more value than straw, 332 pounds; leaving only 74 pounds of really valuable matter. This is divided again as follows: Nitrogen, $2.60; potash, equal to 1½ bushels of wood ashes, $0.35; salt, bone and gypsum, $0.50; carbonaceous matter, $0.10; value of the cord of manure of 3000 pounds, $3.55. Dr. Dana says that a cord of fresh cow manure weighs 9289 pounds, in which there is 7728 pounds of water. I call your attention to this because men who are canvassing for the sale of fertilizers, are very likely to, and do call the attention of farmers and gardeners to the enormous expense to which they are putting themselves by hauling to their fields this great amount of water in a cord of manure, 7728 pounds! and they go on and tell them that it is no better than ditch water. And that is true after all the elements that promote plant growth are taken out. But does not much of the value of manure come from the fact that it is so finely subdivided by passing through the animal organism, and being in the finely diluted condition found in the manure and water; and then when one says that the water is use-

less can you believe it? I certainly cannot, because I know that in the cultivation of plants in a greenhouse the perfection of growth and fertility comes from the use of liquid manure. Why? because the fertilizing matter is so minutely diffused that it presents itself to the plant in that form that is immediately available and readily assimilated and taken into its circulation. How far the use of liquid manure would be practicable in field or garden culture I am not prepared to say, but that it would accomplish great results as to the production of crops I have no doubt whatever; there may be too much labor and trouble in the application to be profitable. And now, after showing the uses of water in plant growth, I should be unwilling to admit that the water in manure, even divested of all the salts, is of no use.

Our own bodies are made up, chemically speaking, of a large portion of water. We find it necessary to our health, growth and comfort, and we believe in it as a class, although once in a while we find a person who, if we judge by his appearance, does not approve of it even for washing purposes. There are 92 parts of water in 100 of turnips, and who thinks it wrong to feed them to cows at the present prices of milk. The meats, fruits and vegetables, in fact almost everything we consume, is, when divided up by the chemist, found to be largely made up of water. Without water we cannot grow anything. With water, by irrigation on meadows, we can increase the grass very much, even from the very small amount of plant food contained in it.

In the analysis of manure by Dr. Nichols, three-fourths of the value was in the nitrogen, $2.60 in the cord. It is an article that is very volatile, and therefore liable to waste; a small quantity of plaster of paris, or dry earth, does much towards holding it. Prof. Johnson's analysis of certain plants from their ashes, and to ascertain the amount of potash they contain: 10,000 pounds of turnips and leaves show 56 pounds of potash; 10,000 pounds of carrots without leaves, show 35 pounds of potash; 10,000 pounds of parsnips without leaves, show 21 pounds of potash; 10,000 pounds of potatoes and their tops show 122 pounds of potash; 10,000 pounds of potatoes is 166⅔ bushels of 60 pounds, nearly ¾ to every bushel; 1000 pounds red clover has 20 pounds potash; 1000 pounds white clover has 31 pounds potash.

The exhaustion of potash from the soil you will see is quite large. The same is true of bone or phosphoric acid, more particularly on farms where the selling of milk is the leading business, a large quantity being sold in the milk itself. To keep up the fertility of the soil, these two articles must be supplied in some form sufficient to replace the loss. Potash and bone are said not to waste to any extent, either by evaporation or leaching.

The last part of the question as to the best and most economical method of applying manure, is a question upon which there will be a great diversity of opinion, but less, I think, after testing fully and fairly the different methods.

Once it was all to be composted, two cords of peat or loam and one cord of manure making three cords, each of the same value as the manure. Then came barn cellars, and with them the idea that we could fill them nearly full of peat, loam or sand, and that it would all come out in the spring, manure. Where these weak preparations from the cellar were put to the test of a crop, it did not do the business, and then the cry was, barn cellar manure wasn't good for much, and it was some time before some of us found out that if we did put the ten cords of loam or sand into the cellar, and dropped down only about one cord from the cattle, we really had only about one cord, after all, and that all that ten cords of loam except what might be sufficient to soak up the liquids, had been carried there more as a mistake than for any practical purpose.

Now as to the application; I do not propose to say to you that this or that method is the best. But I shall simply tell you how I should apply manure for my land, and to produce such crops as I might wish to grow. The base of the manure that I should use for almost any hoed crop, would be barnyard or stable manure. And here let me say that I believe in a good, liberal dressing, of course adapted to the crop to be grown. Now, what might be a good dressing for corn or potatoes, might not be enough for some garden vegetables, particularly where more than one crop is to be grown without additional manure. Eight cords of manure, 400 pounds of sulphate of potash, or, instead of that, 35 bushels of wood ashes, is none too much for a crop of onions.

Ten cords of manure, 300 pounds of muriate of potash 80 per cent., 100 pounds dissolved bone, is none too much for a crop of cabbages on sod land after a crop of early cut hay, the land to be seeded to grass just before winter, and grass follows the cabbage better than any other hoed crop.

Six cords of manure, 300 pounds sulphate of potash 57 per cent., and 100 pounds dissolved bone, does the handsome thing with me for a crop of potatoes. 250 pounds dissolved bone, 250 pounds muriate of potash 80 per cent., 50 pounds sulphate of ammonia 24 per cent., 100 pounds plaster of paris, makes my grapevines grow on a poor gravelly soil as strong as I want to have them, and they fruit abundantly.

In seeding land to grass, which I always intend to in the months of August and September, or if I do not have time then, I leave it until just before winter sets in, I use the manure

made from the cattle, horses, and swine. Of the latter I keep quite a number, and there is more or less waste material from the farm put in their pens. The land having been ploughed at a considerable expense, it is economy to fertilize it well, and I think there is a better return from the manure applied when seeding, than as a top dressing. If I desire to top dress grass land I have found the following articles mixed to be a good application; they should be sown broadcast early in the spring: 150 lbs. nitrate of soda, 100 lbs. muriate of potash 80 per cent., 100 lbs. dissolved bone, the whole costing from $9 to $10 an acre. Do not sow nitrate of soda in the fall.

I have recommended to some of my friends who are market gardeners, sulphate of ammonia for the purpose of a quick action in hurrying up a crop of dandelions in the spring, as one week makes a large difference in the price which they can be sold for. This has been attended with very good results in most instances. In one experiment in its use, the person who used it on one half of the piece without any appreciable increase in the product, I asked him what manure he had applied before sowing the crop. The answer was 15 to 18 cords of stable manure to the acre. With the large amount of nitrogen in the stable manure—more than the crop can possibly utilize, there was no wonder that the additional amount of ammonia did not produce any effect.

The best preparation for plants in pots is to start right in the first place; two or three inches deep of the top of an old pasture of rather stiff loam, piled up with the sod downward, and allowed to rot six or more months, makes the best potting soil. This can be varied by adding sand or leaf mold from the woods, or peat, as the plants may require. Do not sift it, but use it coarse, and in all pots over three inches give good drainage. This may be enriched by old rotten manure to suit the plant. Do not overpot the plants; repot when the roots are in action, if necessary, and afterwards give liquid manure if the plants need stimulating, just as buds are swelling to increase the size of the flowers.

All the manures that I have mentioned are spread broadcast and worked in with a Randall or other harrow thoroughly. I have applied manure directly from the stable in the fall and winter as a top dressing to land to be planted the following year, and am unable to perceive any loss on my land, which is tolerably level. If there is no loss it would be an economical method of application.

I have stated to you my theory and practice. My theory is that the different varieties of plants that I cultivate want ammonia, bone, and potash in different quantities. My practice is to study the wants of the plants themselves, and endeavor to furnish them those articles in a soluble state amply sufficient for their wants.

THIRD MEETING, FEBRUARY 12TH, P. M.

Vice-President O. B. HADWEN in the chair.

SUBJECT: GROWING AND MARKETING SMALL FRUITS.

The subject was introduced by Mr. WILLIAM H. EARLE.

He said he would speak only of such varieties of fruit as will repay cultivation. After a general allusion to the pleasures of fruit culture, he suggested that a currant bush or a grapevine take no more room than a burdock, and a strawberry plant no more room than a small weed. A small area of ground properly handled will supply a large family with fruit throughout the season. Ten square rods will give $100 worth of good fruit, and it is a much better investment than to buy the wilted stock found in the markets.

The first essential is a properly prepared and fertilized soil. There is as much difference in ground as in people, and an acquaintance with one is as essential as the other, if pleasure or profit is the object of cultivation. As the speaker is to read a paper on "Does Horticulture pay, and how," he withheld a further statement, and asked general questioning.

He recommended for general growth, Blackberries, in which there is increasing interest; Kittatinny being the best, if fairly protected, very prolific, free from briers, a free bearer. The Wachusett and the Snyder are also good. They require little fertilizing; good corn ground with mulching is all. They should be pruned when growing, nipping the main stem and taking off laterals when eight inches long. Four feet high is enough.

A listener said his Kittatinnys cost him $1 per quart; Mr. Earle said 21 rods of rows, in '77 gave 509 quarts at 25 cents per quart, or $1400 per acre. He did not fear glutting the market; really good blackberries will sell; they will pay at 15 cents per quart. New Jersey growers are delighted with a return of 6 cents per quart over expenses. He would cut out the old wood in the spring, rather than in the fall, as the old wood supports the new against the snow. He would grow the three named varieties, to have a succession, as they ripen at different times. He would not prolong the season too much with any berry.

He had been disappointed in Raspberry culture. He thought

they all need winter protection. The black-caps are not attractive nor desirable; the red berries are next to strawberries in value; the market can not be glutted. [Mr. Midgeley—Oh yes, yes, I've done it.] I think it would be safe to pledge 12½ cents per quart for all Worcester will grow for three years. The Clarke is the most desirable variety. The "Thwack," a new variety, is highly commended.

Strawberries are pre-eminent. They need well-rotted manure, unless applied in the autumn as a mulch. He would plant so that the crown will come just even with the soil, and would press the soil very closely; be sure to set them firm; and they will live almost always; don't let soil get upon the crown. Plants from a distance should be opened and laid in a cool, dark place until ready to set; the leaves should not be wet in shipping; shipped plants will shrink 50 per cent. with almost any care; trim the roots so as to remove all injured or decayed parts. Of varieties he said the Charles Downing is at the head of the list; for market but few varieties are needed. Next to the Downing, the Jucunda is desirable on a strong, rich soil; the Monarch of the West is good; dries off well and is firmer than the Downing; a good shipping berry. The Downer's Prolific is the earliest, fine flavored and prolific and hardy. He recommended among the new berries the Sharpless as worthy of further trial; Crescent Seedling is fourth rate, about like the Wilson but more prolific. Wilson has become run out in this vicinity. [Strong opposition to the denunciation of the Wilson was shown.] Crescent Seedling is not a good shipper. He said the Wilson is a deceiver; it looks ripe two days before it is ripe; if picked early it will ship safely and keep on a stand, relieving a retailer from loss: but Horticulturists ought to repudiate it except when perfectly ripened, and then it is as tender as the other varieties. Crescent is a pistillate and needs a companion. The Sharpless has a bad form but good quality, and is very productive. In place of the Wilson as an acid berry, he recommended the Capt. Jack; it has a strong stem, holding the fruit up from the ground. The Glendale, as a new late variety is valuable. Of early berries the Duchess is desirable, but it makes but few runners; the Duncan is of a similar habit. He thought the Sharpless will do well on sandy soil, with plenty of manure. Another berry, the Pioneer, is also likely to be popular. The Sharpless is about as early as the Charles Downing.

He considered the growing of Plums desirable; a little gas tar burned under the tree every other day, from blossoming till the fruit has a thick skin, and the curculio can be successfully fought.

Mr. Thomas A. Dawson said the Sharpless, with one year's experience, is very productive, but as late as the Jucunda. He had

grown Wachusett Blackberries several years, and gave them preference, for flavor and productiveness. He believed in high manuring; it gives more and larger berries; full top dressing of hen manure gives big results. From 400 plants he picked 1255 boxes of Wachusetts the second year and got $215 for them. He thought there was danger of glutting the market with blackberries as there are many other fruits in the season, but he had never had enough; his crop averaged 20 cents last season.

He had grown Kittatinny; got great growth but they winter-killed; he had 300 plants but in three years he got less than a dozen boxes, while Wachusetts will stand anything.

The Chair called attention to the fact that Mr. Earle endorsed Kittatinny on rich, warm, sheltered soil, while Mr. Dawson condemns it on an exposed site. Both are probably right.

Mr. Midgeley said if his Wachusetts do no better than heretofore, he will plough them up; Kittatinnys with him are as with Mr. Dawson, no crop at all; he did not manure heavily. He had manured Snyders heavily, with good success.

Mr. F. J. Kinney said green manure will make vines; it is best at the start, but to keep a crop going well rotted manure, or commercial manures, are probably best. He said the Pride of the Hudson Raspberry is a failure only by not being hardy; it is half-hardy; no raspberries are hardy; it is one of the very best, and only needs little protection. He commended the Brandywine as the only really hardy raspberry, and it is an excellent one.

He had grown Blackberries,—Wachusett and Kittatinny,—but the latter winter-killed; it is a better fruiter than the Wachusett; the Wachusett is not thornless; the Snyder suckers but slightly, which is an advantage.

He endorsed the Downing and the Jucunda as best among Strawberries. He approved the Crescent; it proves most desirable on his ground; very hardy, prolific and good size; the flavor is deficient, but it sells readily; it comes to market looking exceedingly well. He was morally certain that berries have been shown here as Crescents which were not true. Crescent is far better than Capt. Jack with him; the latter blast easily; they require a Jucunda soil, but are not half so good. Sharpless and Monarch of the West want strong soils; Sharpless has proved undesirable with him; Glendale is a nice berry, but its thin foliage allows too much sun. He also objected to the Duncan as useless; of the new kinds, Centennial, and the Great Republic, prove among the best.

Of Grapes he said he had two tons last year; wherever high manuring was practiced he had mildew, but with plain culture they did not mildew.

Mr. Earle said the Crescent strawberry had generally been condemned by his patrons; they said they didn't want any more of that kind.

Mr. James Draper said the Kittatinny blackberry did well with him two years, and then it went back on everybody. Wilson's Early was similar in his experience; but Wachusett has stood the racket for ten years, and is far ahead. He believed in high manuring for blackberries. It should be applied green in the fall, close to the roots. In raspberries he said the market glutted easily, in his experience, until he advertised them for canning. He did not like the Brandywine; it had gone "way out of sight." The Philadelphia is the only reliable berry.

Mr. Midgeley said his raspberries last year averaged 19 cents per quart.

Mr. Edmund Hersey, President of the Hingham Agricultural Society, was introduced. He said the Worcester of 35 years ago, when he last saw it, was quite different from what he saw to-day; but the interested audience indicated that green fields are not far away; he was glad to be among those who could teach him. He began as a grower of Peaches at four years of age, and at six was in the Nursery business as a grafter of trees; he has kept up his practice, but did not pretend to extended experience, although he began over fifty years ago.

He said of all the small fruits the Cranberry is especially important. Almost every farm has a favorable spot for its culture, but there are few farmers who realize how much importance it deserves. He thought it easier to make $100 on cranberries than $50 on strawberries. He thought this crop more susceptible to rule than the strawberry crop. The proper location is a good porous peat bottom, with water to flood the ground at any season, and to keep it covered a foot or two deep in winter; a sand bank near by is essential. Such a spot is worth $500 per acre, and can often be bought for $10. So much the better. The top of the land should be removed down to the peat; the soil removed goes to the barnyard. The peat should be covered with sand, three inches deep, in winter, when the soil is hard; vines should be set in this sand. In selecting varieties, quality and productiveness are important. He exhibited cranberries as sold from natural meadows, and others from cultivated ground, between which there was a decided difference in size and appearance. The cultivated variety shown, he said, will produce four bushels to the rod, but it is too light colored; if a dark berry

could be secured it would be most fortunate. A solid meat and thick firm skin should be preferred.

He would not set vines in rows, but in irregular shape, not leaving a spot six inches square without a plant. The bare sand gets hot in the sun, and scorches the young runners. If properly set the ground will cover in two years. The cranberry will grow on 3½ feet of clear sand without fertilization, and give a good crop for twenty years. He thought the use of the peat to be to draw off the water; the cranberry wants water in excess for eight months, and extremely dry hot soil for the other four. He couldn't raise cranberries on cold, springy land, wet all the year round, but could grow good ones, but not to a profit, on a sand bank. There is but little cultivation required, beyond pulling the few weeds for the first year or two. They will yield $300 per acre with no expense, except gathering. He would pick only with the fingers; a rake will destroy the keeping qualities of the fruit; he keeps them from one picking to another, in a basket in the cellar, covered only with a paper. He thought the soil should drain a foot and a half below the fruit, or less if there is a scarcity of water for flowing. The flowing is to keep the frost off the fruit-buds in the spring and the fruit in the autumn. There is a worm also which attacks the vines; it winters in the grass, and winter flowing kills it. Fine gravel may be used, but sand is best for a bed. Cranberries can be grown on high land, good corn ground, but it is hard to keep the grass out on such land.

The Chair expressed the pleasure of the Society in the information from the last speaker, and in regard to the varied statements in the general discussions of the meeting, he said they only represent the result of experience with various forms of culture, various soils, &c. He thought all raspberries should be covered; after a rain, when the vines are supple, turn two rows together and throw on a little loam. Even the so-called hardy kinds will repay this care, in better crops and more and larger berries.

FOURTH MEETING, FEBRUARY 19TH, P. M.

Vice-President HADWEN in the chair.

SUBJECT: WINDOW GARDENING AND WINTER FLOWERS.

The subject was introduced by Mr. WILLIAM G. STRONG,* of Newton, who declared that Window Gardening should never be carried on to the exclusion of light and air from a house. He considers, however, that every one needs a pet to avoid the evils resulting from selfishness, and believes that under the head of pets plants are to be properly classed, he believing in small doses, an intimate personal acquaintance, that the full benefits of them may be derived and a full knowledge of them be obtained; as it can be done only by drawing near to them by watching for the recognition of our care. He believes in the daily influence of plants, to obtain which they must be brought into the house, but he counselled against carrying window gardening to that extent which shall shut out the light and air and make the home dark and gloomy. In this connection the essayist said:

But in our sunny clime, and with our modern skill in construction, and considering the cheapness and admirable non-conducting qualities of glass, it would seem that every one might freely indulge in household plants, and yet have no lack of sunlight. If we were to plan the building of a house, the wise course would be to construct a corner, or a bow-window, with special reference to plants, devoted mainly to this use, and so well arranged that the plants shall flourish in all the luxuriance of a tropical home. To do this only three conditions are requisite, namely, proper heat, moisture and sunlight. Surely you can provide for all these, if you will but plan beforehand. For the majority of flowering plants you want an average temperature of 50 to 60 degrees at night. Hence the register must be near enough to do the work. But even in sunlight it is not well to go above 80 degrees. Shades may therefore be necessary to some extent. A discussion has been going on recently in one of our popular periodicals as to the fact whether plants received nourishment from the air. I am one of the number who believe that the vigor of trees and plants depends very largely upon the condi-

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**Ex-President* of the Massachusetts Horticultural Society.

tion of the atmosphere. We all know how rich and luxuriant is the vegetation in a low and protected valley. Now the richness of the soil is not the only reason for the strong contrast with the growth of the windy hill-top. The dewy breath of the vale bathes the foliage with moisture, while the dry breezes of the hill cause a constant and excessive evaporation from the leaves. Is it any wonder that in the latter case the growth is pinched and dwarfed? Now, if we want vigor, we must imitate the conditions of the dale. The air of our living-rooms is generally too dry for the best development of plants. We want to devise ways by which we can shower the foliage once or twice each day. If we could shut off the bow-window by means of glass doors or even curtains, so as to retain a close moisture for a considerable time, it would greatly invigorate the plants. Every gardener knows, or ought to know, the benefit of shutting up his greenhouse early and then showering and steaming his plants under a high temperature. Just this we should like to do with our house-plants if we could plan for drainage and to shut off from the living-room. Of course we can do this to perfection, on a small scale, in Wardian cases, and with complete success in the production of flowers as well as foliage, if we attend to the conditions. Wardian cases have been principally used for the culture of ferns and foliage plants, which do not require a full exposure to the sun. But by providing for free ventilation they are admirably adapted for the culture of flowering plants, so that the most difficult may be brought to the perfection of bloom even in your parlors. To obtain the best results for plants which require a uniform and high temperature it may be necessary to provide a slight bottom heat for the case. But this may be done so perfectly by means of a kerosene lamp, with a chimney leading any smoke or gas into the open air, and at such trifling cost, that it is a plan well worthy of adoption by those who wish to cultivate the most delicate exotics to perfection. The plan is simply a house within a house, where the conditions of heat and moisture may be under perfect control. You may in this way so regulate your apparatus as to obtain the highest possible degree of excellence in culture, either in richness and profusion of bloom, or in varied effect in miniature landscape, with sunny side and shade, with rocks and waterfall and lakes and grottoes. But notwithstanding the perfection which may thus be obtained in a limited way, I, for one, should prefer that the plant-room itself should be so well appointed as to secure the full and natural development of the plants, with free and open access, so that we may actually sit under the shade of orange trees in full fruit, and find a grateful shelter from the too direct rays of the sun, as I have

done during the most stinging days of winter. Let me tell you how I have altered a cottage-like home in Newton. When I bought it, it had a veranda running almost entirely around it, with cornice, or coping, which came down to within eight feet of the floor. However pleasant this might be during the summer season, it was apparent that the house must be dark and shaded during the winter. As a simple and complete remedy for this I enclosed the veranda on the south side with upright sashes, and, presto, the whole south side of our house is changed into a glass conservatory, which is flooded with light. Our very next problem, but of course an easy one, was that of regulating this blaze of light by means of shades. Heat was provided by means of an additional hot-air pipe from the furnace. A temporary double roof is provided, 8½ feet above the floor, to prevent the heat from rising to the roof of the veranda. The entire structure is temporary and of the simplest form, costing but $80. We remove it in April, and put it up again in November of each year at a trifling cost of time. The result is that we throw open our front doors and windows, not again to be closed during the entire winter. We close our furnace in the morning of every bright day, however cold it may be, and yet the whole house is radiant with the light and warmth and fragrance from the veranda. Considering its heating capacity in bright days it is a question whether we ought to debit anything to the account for fuel for cold nights. At any rate, the item is very small. I do not say that in so large a room, which is kept so open and from which we are continually passing out of doors, we could obtain luxuriant growth except by means of cases and a more confined temperature than I have provided. But we have no difficulty in keeping oranges, palms, acacias and kindred plants in perfect health, while camellias, azaleas, cytisus, carnations, and all the Dutch bulbs develop their blooms to perfection.

So great is our success, attained so easily and with so little cost, that it is a surprise to me that more do not adopt this plan of glass protection from the winter cold, this trap to catch the sunbeams, this annexation of a bit of the tropics to our northern homes. Can you not plan, my friend, how you can enclose your porch, or your piazza, or some projection of your house, or build out a bow-window or an annex, so as to secure all the advantages of sunlight in your dwellings, and also give you all the enjoyments which come from an intimate daily study and care of plants?

Considering the care of plants, he said love of them is the first requisite, and definite rules cannot be laid down. I will admit, however, that there are a few general laws of health which it is

well to follow. There is danger of over-watering plants in the winter time. A cold, wet and stagnant condition of the roots is very injurious. On the other hand, the air of living-rooms is apt to be dry and hence the draft of sap from the leaves is severe, therefore the plants must not be allowed to get too dry. See that your pots have thorough drainage with crocks, and water only when the pots look dry; a good soaking with water about as warm as the blood. The leaves of plants will sometimes become dusty in the house, and may be benefited by being washed with a soft sponge. Better by far is a strong stream of water to remove dust and also insects, wherever it can be applied. Oftentimes a hot bath is the easiest way to be rid of aphis and red spider. The water should be in a wooden pail or tub to hold the heat at 120°. The plant is to be plunged head foremost into the hot water and withdrawn within five seconds. A second and shorter plunge will wash off all remaining insects, if followed immediately. This is a short and effectual process for most insects, and is not injurious to plants except in rare cases of tender and succulent growth.

In regard to feeding plants, let me say I know of nothing that will compare with the liquid from the stable. Let it be dipped from a barrel and as free as possible from sediment. There is not much danger of using too strong liquid from cow manure; from the horse the liquid is stronger and better, but should be much weaker. When plants are in vigorous growth and are needing nourishment, this food may be applied once a week. By watching you can detect whether the plant will bear more, or is over-fed. Guano water, used with great care, is the next best food, in my judgment. Weak potash water is excellent to correct acidity and destroy worms, as well as to fertilize. Preparations known as plant-food are expensive, and have not given me such results as I anticipated.

Now as to varieties, what can I say to you, but—take your choice? If you will but treat them well, there is an army of candidates willing to enlist. You can manage almost anything which does not require close stove heat and moisture. Even this you can have in the Waltonian, or modified Wardian case. But undoubtedly there are some classes of plants better adapted to house-culture, and more effective than others. Geraniums, especially in the horse-shoe and tri-colored varieties, are always attractive by their fine foliage and bright colors, and they do remarkably well. Cytisus racemosus, the common broom of Europe, is an exceptionally good variety for house-culture. Its delicate foliage is pleasing; it is very floriferous, and the bright canary color is sunny and cheerful, while the delicious lemon-like fragrance is

pervading, but never overpowering. Probably no class of plants is more profuse in gay flowers of nearly all shades of color than the Azalea Indica. In the summer time it is best kept in pots in peaty soil in the open air, where it sets and matures its flower buds for winter use. Hence all the strength is stored away beforehand, as is the case with hyacinths and other Dutch bulbs. You have only to develop the flowers in winter by a gradual process and the result is certain, complete and superb. The same is true of camellias, only they are a little more difficult to manage and are more sensitive to the heat and dryness of a room. The effect of an orange tree, well loaded with fruit, is very striking. The fruit begins to ripen in the fall and will hold until March, when the tree throws its blossoms and fills the air with its delicious fragrance. It is of easiest culture and well adapted to the house. I might wander on and weary your patience with an almost endless list of plants, but to what profit? Let me rather turn upon one of my hobbies, and say a few words in conclusion upon the winter culture of the Rose.

Why is it that there is such poor success in forcing roses in pots? Perhaps I have asked a very foolish question in this audience. Perhaps you can produce fine specimens of Safrano and Bon Siléne, and Isabella Sprunt and Niphetos, or possibly the more difficult Devoniensis or Souvenir de la Malmaison, or even the Marechal Neil. Well, I am glad if you can. I should like to come and see how you do it. Still I think it is true in the experience of most, that the house-culture of these varieties is not usually satisfactory in its results. The plants are generally weak in growth, and give few and feeble blooms. It is true that the air of our rooms is not favorable for the vigorous growth of the rose. It is so warm that the growth starts too quickly; it is so dry that red spider is likely to draw all the life from the leaves. These difficulties you who love and watch your plants can and will overcome. And yet they do not bloom as you feel sure they would if all their wants were satisfied. This experience of yours in the house-culture of the ever-blooming varieties, the Teas and Noisettes, is precisely the same as the gardeners are passing through in the winter-forcing of the hardy perpetual varieties in the greenhouses. Ever-blooming kinds they know how to force, but why is it, they ask, that when they start their hardy kinds, they break weak, and the young shoots, though they grow rapidly, do not show flowers? The reasons are probably the same in both cases and are two-fold. First of all, the plants have been started too rapidly and have developed at the top before the roots have become sufficiently active to sustain and impel the growth.

This quick starting is sure to cause the best prepared plants of

Hardy Roses to go blind of flowers. It is of the greatest importance that the roots of all varieties should become active in advance of the tops, so as to become the impelling power. Beware lest you invert the process and cause the leaves to become the pumping power. It is well to treat your pot roses as you do Dutch Hyacinths; plunge them in a cold frame in the fall, or in the cellar, anywhere that you can keep the roots warm and comfortable while the tops are cold. See that the young and white roots are pushing strongly before you bring the plants into the house. Let them start slowly, as in the case of a lingering spring, and you will have shoots and foliage, as well as bloom, which will delight the eye. But no, this is not all; one more condition back of this we must have, if we would avoid all disappointment. In the case of many plants it is obvious that the bloom is developed and matured by the growth of the previous season. The Camellia and the Azalea, as you may have noticed, set their buds large and plump in the fall, and only await expansion in the warmth of spring, or earlier if they are forced. Now it is evident that in these plants the main part of the work is already accomplished, the strength is stored up, a genial atmosphere will expand the buds and do the rest. Now we may not as plainly discern in all plants this economy of nature in accumulating force for future use, but experience is certainly indicating that it is none the less true with roses and with all our most valuable plants. Nature makes careful preparation beforehand; she lays sure foundations before she entertains the thought of ornament. Surely the knowledge of this law is a great advantage to us who propose to obtain all the beauties of the seasons in mid-winter. For if we can store up a reserve force in the plants in the summer previous, with all the help of a genial sun, so that we have only to develop these accumulated stores, why then the winter work is largely done before it is begun. Yes, this is really so. We can produce rose plants of such vigor and with such ripened wood in the summer previous that little is left to be done except to give a gradual development. If you will do this, if you can so encourage your plants during the summer that the pots shall be well filled with strong roots in the fall, and the wood is hard and firm and the eyes are prominent and large, then you may say that nine-tenths of your work is done, and the rest is easily accomplished. No potting on or shifting is to be allowed; only cutting back the wood to a few prominent eyes and starting them slowly after a short rest. By giving heed to the proverb of the wise man, and following the example of the little ant, which having no guide, overseer or ruler, provideth her meat in the summer and gathereth her food in the harvest, we

also may lay up store of strength sufficient for all the exigencies of winter. Rightly managed there is no reason why the hardy roses may not be forced in our dwellings. They will not give the profusion of bloom throughout the season of the ever-blooming class, but they will give one abundant crop, and of such fragrance and richness of color, as will far outweigh any possible lack. So highly prized are these superb varieties that the blooms will always bring extravagant prices in the winter season, 75 cents each being the rate to the producer for the past six weeks for the best specimens. The blooms of General Jacqueminot have been worth $6 per dozen for the same time, while such varieties as Bon Siléne, Safrano and Niphetos have been rated at about $6 per 100. But, horrors! what am I doing! I began by warning you against the sin of selfishness, and invoking the sweet influences of plants to eradicate the evil. I pray you to forget what I have last said, and never allow yourself to estimate the beauty and the value of a rose according to the money the sweet thing will bring in the market. Is it not a sin and a shame that such "a thing of beauty, such a joy forever," should be an article of merchandise to be bought and sold at any price? Heaven forbid that we should ever become keen to discern the scent of money in our plants!

In answer to various questions, Mr. Strong recommended tobacco for plant insects in general, hot water for the red spider, kerosene oil for the mealy bug. In regard to the English Ivy, he would water freely when growing strongly, sparingly when feebly. The Calla should not be over-potted, and should be given plenty of water. One trouble in growing roses is that they are generally over-potted; and the use of such peat as Elm Park is said to afford he pronounced injurious to the plants until after it has been exposed two or three years.

FIFTH MEETING, FEBRUARY 26TH, P. M.

President SALISBURY in the chair.

SUBJECT: OUT-DOOR FLOWERING PLANTS.

By Mrs. THOMAS L. NELSON.

In talking this subject over we must remember that we are talking of the climate in which we live, and not wander away to other lands: our object being to find out, if we can, what flowers will bloom and give the greatest satisfaction in our changeable New England climate. Our summers are hot and trying, our winters are cold and warm alternately, and we are at our wits' ends how to grow anything and how to keep it after it is grown. The bane of our American people is haste. Almost everything we do is done in a hurry. Now nature will not be driven beyond a certain extent, but although we may not drive we may coax a great deal out of her. Patience, however, not haste, must be our motto. One trouble with us is, there is a certain class of plants that are raised in the greenhouse and in our own homes that are called bedding plants; not a very large list all counted; geraniums, heliotropes, verbenas, pinks, salvias, feverfews, and some others, which people run eagerly after, and think they must have. In fact, I heard a leading florist say, that for summer these were all it would pay for him to raise for the market. Look for instance at the sales by auction in the spring. The class I have mentioned with a few basket plants and pansies (especially if they are in the last stages of bloom), will sell for prices oftentimes beyond what they could be bought for at the greenhouse, and delivered when wanted, while a plant of twice its value goes for almost nothing, simply because it is not known. If people would inform themselves a little on the subject of flowers—how they grow, what soil they need, and what kind of fertilizer their particular soil needs—there would be a great change in out-door bloom; because bedding plants can be bought for little, and bloom well, they care for nothing beyond. I would not discourage growing bedding plants, but want them to be used as filling-up material; in fact, to cover up the places made vacant by the winter.

I often hear of the deep interest which the old residents of Worcester had in this Society, the fnnds they have given to carry

it on, and the contributions they made to its exhibitions, and I wonder why the interest is not kept up by their children. Do they not feel that it is left with them to carry on the work that their fathers and mothers began? Young ladies don't like to don the garden hat and gloves, and, trowel in hand, raise flowers to decorate their homes and themselves, because it is dirty work, and they are afraid they don't look as well as they would in fresh muslins, reading a novel, or doing some fancy work. And young gentlemen think it more elevating to go fishing or boating, or something of the kind. I say to both, don't be afraid of digging, there are treasures to be found in garden work, which will soon make you forget the dirt and only look for the results. Mothers! remember it is better to take your little ones out with you, and, if too young to have a garden of their own, give them a pile of sand. Don't be afraid of soiling their clothes. Teach them to dig, and however young they are, you will soon find them watching you and trying to imitate. After a season of this, you will find their strength and muscle in a much more healthy condition than if they were left to their nurse girl to be trundled through the noisy, crowded streets.

I am glad that at last the "queen of flowers" is asserting her rights. The rose fever is in its first stages, and the pulse runs higher and higher each succeeding year. When it will reach its highest may not be in our day, but it is truly wonderful the progress that has been made in the last twenty years. Now let us devote a little time to our best loved, much abused flower, the Rose; abused, because with the attention we pay to even the commonest annual, we may have the rose in its perfection. Too many people think because some kinds of plants will grow and bloom in poor soil, all will. No greater mistake was ever made. The rose is a gross feeder, and demands a rich, close soil, well drained and enriched at least once a year by old well decomposed dressing from the farmyard or stable, left on the surface if applied in the fall, and dug in in the spring; or if in the spring forked in, so the roots may derive immediate benefit. In growing the bybrid perpetual roses (I think remontant is a better name), rose growers differ on the point of budded roses, or grown on their own roots. One half the people don't know, or seem to care, which they have. One firm sends out budded roses, unless otherwise ordered, and another sends on their own roots, unless otherwise ordered. Now what is the result in the case of the budded rose unless care is taken in setting? Sometimes the bud is well above ground, sometimes below. Everybody who would grow the hybrid perpetuals should know that they are a cross between some of our finest June roses and the ever-blooming class,—Bourbons,

Bengals, &c.,—and of course can not be as hardy as June roses. So if the bud is above ground, and not properly protected from the weather, the best part of the rose is liable to be killed, leaving nothing but wild stock. The best authorities say, take budded roses by all means. The roses are finer and the growth far beyond what we can get on roses on their own roots. It is advanced as an argument in favor of roses on their own roots, that the stock on which they are budded is so much more vigorous than the bud, that the suckers overgrow the bud. It is no hard matter to detect the sucker. If the bud is above ground surely you can detect the difference, and if below, if you have any doubts, dig a little below the surface, and set them at rest. As far as my experience goes I much prefer budded roses. Budded roses that I purchased of Elwanger & Barry in the autumn of 1878 bloomed in the following season three and four times during the summer and autumn, each time perfect in form and color, while I have growing in precisely the same soil and location roses on their own roots set out the previous year which have never shown bloom. I believe I set in 1877 ten on their own roots, and at least four out of that number, strong, vigorous plants, have never bloomed, while out of 17 budded roses set in 1878 all, with the exception of four, bloomed last season, and those that did not bloom had not got established and strong enough to bloom. Mad. Victor Verdier, Mdlle. Eugenie Verdier, Louis Van Houtte, Alfred Colomb and Marguerite de St. Amande were among the budded roses. So you can readily see why I prefer budded roses. I need not tell you how to keep off the enemies of the rose, as Mr. Hyde told you all about that a few weeks ago.

Now let us glance at the ever-blooming roses. I leave mine in the ground, year after year, and save almost all of them, certainly more than when I used to take them up in the fall and plant them out again in the spring. First grow them well during the summer. Give them plenty to live on. Then in the early autumn give them a dressing of well-rotted compost. Then late, after quite severe frosts, pin them down and put leaves over and around them, and cover with boards. Quite early in the spring take off some of the boards and give them a little air. After, remove both boards and leaves and dig in the compost. Some of them will die to the root, but a good vigorous root, ready to start, is worth two greenhouse plants. I have, however, wintered just as successfully by covering with sods instead of boards. In both cases be careful not to open them too suddenly after their long winter's rest. In a former paper I told you there was little difference between the hardiness of the hybrid perpetuals and the tender roses, and after two more years I repeat the assertion,

that as far as my experience goes that is the fact. Last winter a tea-rose, Bon Siléne, standing in a sheltered spot, was forgotten and remained uncovered during the winter, with only a slight protection of leaves about the root, and last summer it gave as fine blooms as I have ever seen. What I have said may be old to many of you, but I hope to get some information from those that are much farther advanced in the art of raising roses. I do not wonder that amateur rose-growers stand appalled at the elaborate directions given by writers on roses, notably the English. I do not think that we Americans, as a nation, love flowers as the English do. I am told (I have never been there) that the cottagers vie with each other in their small gardens, and produce flowers that practical gardeners might well be proud of. It cannot be that they have great resources, but one thing is certain, they do not say, as I have been told recently by a friend, "I have no time to grow flowers." It is easy to find time for whatever we want to do, especially when the heart is in the work. I drift almost without a thought from the rose to the lily. In my mind they are always associated, and, although I have little to say about the culture of the lily, I will speak of some of the different varieties. All of the lilies which we cultivate are not entirely hardy. Lilium longiflorum must be protected with a light compost. Auratum is very particular where it grows, and sometimes, under what seem to us favorable circumstances, disappears entirely. I wish we could be as sure of it as we are of the lancifoliums. Lilium Humboldtii and Lilium Parryii, two fine varieties from California, are coming into market, and promise to be acquisitions. Perhaps the new lily Parkmani, a cross between auratum and rubrum, will prove more hardy and reliable from the fact that rubrum is so robust in its growth. Benj. T. Wells, of Boston, is importing some very fine varieties from Japan. Amaryllis formosissima is fine for bedding purposes, and gives general satisfaction; also, Zephyranthes rosea, a beautiful pink lily-like flower. There is a white variety of the latter, but it is not common, and I do not know how it would be as a bedder. The Zephyranthes is also called the Atamasco Lily. The Gladiolus is one of the leading flowers now, and there is an almost endless list of them, and when we think of the time when there were only two or three varieties, how strange it seems. If given the soil it needs, it is rampant. I have found a rich, clayey loam produced exceedingly fine flowers, and the roots raised on that soil were the finest I have ever seen. One ought to make successive plantings; about three, two weeks apart, will give early and late blossoms.

The Tuberose is easily grown—at least I find it so; whereas I

used to think some years ago it was difficult. I start some in pots for early bloom, and plunge in the border when it is warm enough to trust them out of doors. Others I plant in the ground after it is thoroughly warmed, and they soon start. If in the fall there is danger of frosts, no plant is more easily lifted. I never saw that it made the slightest difference with the bloom. It is very important that we have strong northern-grown bulbs. The Clematis is of great value for summer bloom. I think it thrives in almost any soil and location, and is especially adapted to covering stumps, making screens, and covering unsightly places with masses of beautiful bloom. The foliage is almost evergreen, thus making it doubly valuable, and their growth is so vigorous they are getting more in favor each succeeding year. Another fact ought not to be forgotten, they bloom almost constantly during the season. It would be useless for me to speak of the deutzias, spireas, hydrangeas, and other hardy, flowering shrubs, as they are so sure to live when once established; they form, with pæonies, hardy phloxes, perennial delphiniums, and other hardy herbaceous plants, a class to be depended on year after year. Anemone Japonica, alba and rubra, are beautiful fall flowering plants, entirely hardy, and very strong growing. I must touch lightly on the aquilegia family, as I consider them of very great value. Aquilegia chrysantha, the beautiful yellow variety, cœrulea, blue and white, and a hybrid between the two, which our Secretary introduced into this city three years ago—blue and yellow—I believe he calls it Cerulea hybrida.

The varieties raised from the last named are numerous, as shown in some gardens in this city, and on Elm Park. I noticed an article in the *Gardener's Monthly* for December 1879, entitled "Hybrid Columbine." "The *Garden* gives a colored plate of an aquilegia, in which the sepals are bright blue, and the petals yellow, a hybrid between the American Aquilegia chrysantha and the A. cœrulea." Now this is the aquilegia that many of us have grown, but the worst feature about it is, it scarcely ever comes true from seed. There are a great many nice varieties older than these that are well worth cultivating. The only difficulty in growing them is the liability to damp off, and there is a worm that eats into the centre of the stalk and causes it to droop without any apparent cause. I am told the only way to destroy it is to cut the stalk open and destroy the intruder. I have found lime water would make the plant revive, by which I inferred that the worm was dead. One of my especial favorites is the Pansy. How beautiful the many varieties are, has been demonstrated time and again in this hall. So easily grown, and requiring so little care, I suppose if some of our florists were to show baskets of plants in

full flower, side by side with plants ready to bloom, the blooming plants would all be sold before a customer was foundfor the nice little plants, worth three times as much, which would give some summer bloom and an abundance of blossoms all through the autumn. The mania for over-grown plants in full flower extends even to this modest flower. I should buy of reliable parties, small plants, and not have the dissatisfaction of seeing them droop and die in warm weather, as the large plants almost always will. Then comes the glory of the late summer, the Asters. Unlike many of the annuals, light frosts do not affect them, and they give us varied and beautiful bloom after summer flowers are gone. And, latest of all, comes the Chrysanthemum, the pride of the autumn. All of us have grown them, more or less, still we do not grow them and grow the new varieties as we ought. And now the winter has come, and we must leave our summer flowers to take their rest.

I sometimes wish our climate were always summer, and then the question comes up should we prize our out-door flowers as we do now if it were always summer? I should like one thing, however, and that is a little more length at both ends of our summer. As it is, everything takes us by surprise. The spring is late, and warm weather finds us unprepared for it, simply because we have waited so long. Then, while in the midst of summer weather, a killing frost, like the one we had last September, comes, and we awake to find our choicest flowers drooping and dying. There is no other way if we stick to our rugged rocks and bleak winter winds, but to be watchful and beware, knowing well that when we least think it, the enemy of our friends the flowers, cometh.

SIXTH MEETING, MARCH 4TH, P. M.

Vice-President HADWEN in the chair.

SUBJECT : ORCHARD AND VINEYARD FRUITS.

The subject was introduced by Dr. JABEZ FISHER, of Fitchburg, who remarked that the theme was too extensive for one afternoon, and he felt obliged to confine himself to some one of its branches. He suggested that as his name was synonymous with Grapes, if the audience desired, he would talk of the cultivation of that fruit.

In choosing a location for a vineyard, he would select one as far north as possible where he could succeed, as insuring the best results, but would not go further than his present location. You must choose a gentle southern slope, tending a little to the east, to get the advantage of a tropical sun, which the grape loves, the hotter the better in this region. The soil should be lighter the further north you go, but you cannot get the best results from a light soil. Any ordinary preparation is good enough, cultivation a year or two previous not being required, and highly cultivated land being avoided, as it gives too much wood growth, while a proper balance of all the powers of the vine is necessary. If the ground is in sward, plough ; not deeply, however, as deep ploughing tempts the roots to run out of the influence of the sun. Plough just enough to kill out the sward. The best vines are those not over a year old. Properly treated two-year-old vines are a little better than those one year old, but not enough better to pay for the trouble, and those just ready to bear are worth little more than brush, and not worth saving, unless to preserve a variety. Planting is a simple matter, and 600 vines can be set with one helper in an afternoon. Shorten in the vines to six or eight inches of root in a system like a cart-wheel, scoop out the soil four or five inches deep, set the plant in, and tread on the soil to compact it, taking care to have the soil friable in the beginning, to bring the mellow soil against the roots. The first year the vineyard can be used for growing anything else. Set the plants six feet apart, in rows eight feet apart, although this may be altered to suit the soil, the rule being the one he follows. Have the trellises run north and

south, to get the sun's rays on both sides of the trellis and on the soil near the roots, so that it will be warmed up and kept warm through the night, and because it is less liable to wash. The plants can be let alone the first year, as training to a single stem produces a single root, while allowing it to spread produces spreading surface roots, which are preferable. In the fall prune off everything that is grown, leaving only two or three buds to start from. The second season train to a single stem, and at the close cut off all that has grown as before. The third year build a light trellis, coating the posts, which have been well seasoned, with gas tar boiled with dry slaked lime to preserve them from decay. Well seasoned posts thus treated will last 15 to 20 years, but a green post thus treated will decay sooner than if not coated. He would use No. 15 galvanized wire, with four strands to a trellis. The third year train with a single stem to the first wire, then horizontally six feet, pinch off and allow to grow at random, pinching the laterals to one leaf. The next vine carry to the third wire, and then train along as before, treating the vines in this manner alternately, as it makes cultivation much easier. At the close of the third season your vines have a strong cane, and six feet of horizontal wood. They are not allowed to bear, as they are not able to do it, and cannot recover in less than three seasons, if they ever do, if overloaded then. Then cut the horizontal cane back one-half, leaving only three feet for the next year, when about ten upright shoots will start to grow, and out of them you should select say the best six. Rub off the smaller ones, and from each shoot you will get from one to four clusters. If four, cut off the two upper ones at once, leaving only two to a shoot. Wait till they blossom and set their fruit. Then cut off one of them and the six clusters will bring you as good a return as a greater number, and more than twenty-four will. The fifth year about the same programme, but if the vines have done well you may leave all the horizontal wood and get twelve clusters. If the clusters threaten to weigh twelve pounds some of them should be taken off, as a vine can carry but six or eight pounds in a season and repeat it. The care during the fourth and fifth years, and afterwards is to pinch out the shoots after tying them to the wires, and all the clusters but one ; continue pinching out all the laterals, leaving one leaf each time, as good fruit and much wood can not be made at the same time, and the little new leaves must not be allowed to cover up the older larger leaves which are the lungs of the vine. He has had leaves from fourteen to seventeen inches in diameter, and those twelve inches are common. With such foliage there is no difficulty in growing grapes. While doing this, preparation has to be made for the next year's crop, as

it is determined the season previous how many clusters there will be and how many berries on a cluster, and how many buds will open. It takes two years to make a grape crop, and nothing can be done between now and next July to alter the one now in embryo, therefore in the spring preparation must be made for the next season. Overloaded vines will not mature either wood or fruit, and the crop is not worth half as much, and the next year's crop will be only half a one. On light soil he would use barnyard manure, but on strong soil he would not, as it would destroy the balance of the vines. He uses chemical fertilizers, as his soil is heavy, but just what a soil needs can be determined only by experiment, and he is engaged in making experiments which will have to be repeated time after time. Being asked the remedy for a vine which has grown luxuriantly for twenty years without fruiting, he said dig it up. Dooryard vines, as a rule, are too highly manured. There is a good deal of work about growing grapes as well as everything else, and the vines must be looked after closely or you will not succeed, as they must be attended to at just the right time. The shoots should not be tied till after they have become a little woody and reached the wire, and all should be tied up at once, usually about the 10th to the 20th of June. Never had seen the thrips out-of-doors. The only grape to cultivate for market he believes to be the Concord, as ensuring a crop nine years in ten, while with others a crop cannot be got more than seven years in ten, and some not more than two or three. With him the Delaware sometimes mildews, and then the grapes don't ripen. The Rogers either give a valuable or a worthless crop, and are inclined to mildew, and you must have a vine healthy two years in succession to get a crop, and this is the trouble with many varieties. The Worden he had grown till it produced two excellent crops of Concords, and the Brighton he had found to mildew badly ; the Concord is thin-skinned and will not keep long. To keep at all they must be put into a cool, dry, uniform atmosphere, and the same is true of any fruit. He never handles the fruit, laying it as soon as picked on boards and carrying to his cellar, where they remain till ready for the market. Grapevines bleeding to death is an old woman's whim, and he prunes at any time though preferring the autumn. After the buds swell he would prefer to rub them off instead of pruning, but would not hesitate to prune if he wanted to.

SEVENTH MEETING, MARCH 11TH, P. M.

Vice-President HADWEN in the chair.

SUBJECT: DOES HORTICULTURE PAY, AND HOW?

The subject was introduced by Mr. WILLIAM H. EARLE, who commenced with a tribute to nature, and treated the class engaged in the cultivation of the soil as that in whose success the interests of mankind are so much involved that every question concerning the production of food, fruit, flowers and plants, deserves serious attention. In speaking of Horticulture he said that whether pursued as a recreation, or as an avocation, it has a peculiar interest in training us to habits of quick observation, in ennobling and elevating the heart and life; for the more we comprehend design and purpose in the works of nature, the more we shall learn to understand the fitness of means to end, in human conduct. Speaking of the manner in which the work is generally done, he said:—

But few seek to comprehend those laws, in accordance with which individual effort is alone able to secure the best results. It is the right understanding and application of the laws and conditions which govern and control the application of human industry to the original materials that the Creator has spread around us, which largely determines the profitableness of our labor, which gives us abundance, health and contentment, or brings to us unrest, privation and want. The life of the farmer should invite to something more than ploughing and sowing, and sweating in the harvest, and gathering into barns. This body is not our real life, but only the covering of the man. More than the body the mind needs food and growth, and we should care for the body for the sake of the mind and soul, the real man. Now the surroundings of our earthly homes affect beyond all recognition the higher development. Whenever I pass a farmhouse with the garden all gone to weeds, fences down, and everything all "out of fix" every way, in these outer surroundings I see a copy of the inner life of the owner; even where the surroundings show thrift, if the well-kept buildings have about them neither tree, hedge, nor plot of flowers or grass, I cannot reconcile such a life with any sound philosophy. From such

homes let us not be surprised to find that the young men and maidens will continue to go away. The sons of such farmers are rushing to the cities, glad to get away from the work-work-work and drudgery of the farm.

The farmers around such a city as this are the proper class to take the lead in the knowledge and practice of Horticulture; in the making of homes beautiful and valuable; something to love and be proud of; and it is gratifying to see that many are doing this. Every farmer should, in connection with the other uses and productions of his lands, devote a liberal portion of his time to orchards, gardens, small fruits, plants and flowers. And farmers who will spend a portion of their time in this way will never have cause to regret it. They will find their example followed by scores of others, thereby raising the standard of refinement in their own neighborhood, while in a pecuniary view the investment will pay three-fold in increased health, wealth and pleasure. Their children, too, will many more of them cheerfully remain at home to join in such, no longer irksome, labor; while their shiftless or stingy neighbors' children will be likely to show themselves at the old homestead only at the annual Thanksgiving, or, perhaps, from a sense of duty as well as relief, "to attend the old man's funeral."

Every farm should have an orchard, garden, vineyard and small-fruit plantation, for luxuries and health as well as profit. There is naturally implanted in every human breast, when not extinguished by the cold, selfish reasoning of the world, an admiration and love for the good and beautiful, which, properly improved and cultivated, seeks and finds exquisite pleasure in all that is exalting in the works of Creative Power. An example of this we have in the life and character of the late John Milton Earle, who for so many years devoted so much of his time and thought to the interests of this Society. How much we are indebted to him for the benefits we have derived from his accomplished mind, his unwearied industry and elevated character. His services will be long and gratefully remembered. May the reflection of his genial face from yonder painting long continue to shine upon us as an inspiration and a benediction.

The adornment of our homes has a moral influence. The love of the beautiful never becomes extinct in the human soul. It may be crushed by selfishness and avarice, blurred and stained by sin and crime; but deep in every heart the latent spark remains, and needs but some purifying influence to bring it into healthy action. Even the convicts in our prisons, it is said, rejoice to get at the sight of flowers—sweet flowers;

"They blossom in every nook and place,
In this beautiful world of ours;
And like the sight of an old friend's face
Is the smile of bright, bright flowers."

In horticultural pursuits practice should be guided by science. We should learn the name of different kinds of plants and flowers so that as we read books we may understand how they explain how plants grow, live, and form seeds. By understanding a few plain, scientific terms, we shall be induced to open our eyes and ears, and wherever we go, find

"Tongues in trees, books in the running brooks,
Sermons in stones, and good in everything."

Have we any right to go through the world looking upon everything as so much to eat, to drink, and to use? Should we not ask ourselves why things happen, and how God governs this world of ours? Why does the wind blow, and why does the little flower open in the sunshine and close in the storm?

Mr. Earle here gave a comprehensive sketch of the development of plant life, and briefly described the relations existing between it and insect life, concluding that they were guided by the law of mutual help, the law which bids you and me be kind and good to all those around us if we would lead useful and happy lives. If, said he, you are ambitious only to ascertain how you can get so many dollars for so much labor, your investigations will end when you have found out a few facts about the conditions most favorable to plant growth; but if you desire to learn more and more of nature and enjoy discovering its secrets, you will soon get at the spirit which lies under the facts, and love knowledge for its own sake.

To enjoy Horticulture and make it pay, he considers it necessary to love nature. If we wish to enjoy otherwise dry facts we must clothe them with real meaning, and love the truths they tell. In this driving age of ours, when restlessness and love of excitement pervade so many lives, is it nothing to be taken out of ourselves and made to look at the wonders of nature going on around us? Try it, my friend, the next time you are melancholy, or have the "blues"; just go out in your garden alone and interview some little plant or flower, and ask what story it has to tell; see how their scents and colors attract the insects; learn how insects cannot live without plants, nor plants without the butterfly or busy bee; and thus when we see the quiet, steady working of these fixed laws, we shall, in a measure, lose our impatience, and recognize a law and purpose in everything in the universe,

and realize that the same power that adapted the flower to the insect, and the insect to the flower, is also moulding your life, and by varied labor and discipline fitting you for a higher destiny. No one who loves nature and studies it can ever long feel alone or unloved in the world.

Let us then cultivate these God-given fruits and flowers, not alone for the dollars we may get from them, but for nobler objects also. Every tendency in their whole cultivation is to ennoble, to elevate, to refine. They add new joys to our homes, and new pleasures to our friends. They give health and vigor to our bodies, both in their cultivation and consumption. Let us grow them in abundance, and spread them upon our tables with a generous hand. Unlike much of the food we eat, there is no deception in their manufacture, no adulteration in their substance, no lurking poison in their delicious flavor. In their presence our homes shall echo with the laughter of happy children, made glad by the lessons of truth, purity and happiness that fruits and flowers shall teach ; and through our love of nature shall come love in its manifold forms,—love of our work, love of truth, love of integrity, love of man, and love to God.

EIGHTH MEETING, MARCH 18TH, P. M.

Ex-President WM. T. MERRIFIELD in the chair.

SUBJECT: TREES AND SHRUBS FOR ORNAMENTAL PURPOSES.

By OBADIAH B. HADWEN.

Thirty-seven years ago I purchased some land, the major portion of which had, for many years, been used for pasture.

I found thereon trees growing from nature's planting; there was the Elm, the Oak, the Hickory, the Ash, Chestnut, Birch, Bass, Pines and Spruce, with trees and bushes of smaller growth indigenous to the soil and climate.

Among them were some trees that had undoubtedly been growing for nearly, if not quite, a century, and even now remain unscathed. They have attained diameter of trunk and upright spreading tops, casting shadows for long distances; and are accustomed landmarks. During the intervening time I planted seven sorts of Oak, eight of Maple, five of Elm, three of Chestnut, four of Walnut, four of Ash, three of Linden, three of Horse Chestnut, three of Beech, three of Larch, five of Pine, eight of Spruce, six of Arbor-Vitæ, four of Magnolia, four of Birch, and one or more of many other sorts.

Upon my open farm lot, unadorned by tree or shrub, save a few hardhacks which, nestling close to the fence, had escaped the annual clipping of the scythe, I built a small farmhouse and planted about it trees and shrubs, some indigenous, others having their origin in foreign lands. I have passed many pleasant hours in watching their annual growth, each differing from the other in form, habit, leaf and bloom; some of them are already grown to be shapely and stately trees. They shelter the habitation from fierce winds, also afford a sheltering belt to the northward and westward fields; adding rural aptitude to the surroundings, and charms to the farm landscape, strewing the roads and walks with shade, which will endure for generations after the hand that planted them has ceased to labor. May the habit of finding enjoyment in trees and flowers thrill others with enthusiasm, and encourage the thought to cultivate them!

Among these belts and groups of trees squirrels breed, living in hollow boughs, gathering their sustenance from the nut and seed-

bearing trees. And in their sports, as daily seen from the windows, measuring long distances with their daring leaps from tree to tree, are even utterly unconcerned at our presence, and impudently chirp at the cat as she sits watching and wishing. The partridges bud from the apple trees and often whir away from our very footsteps. Birds in great variety nest and rear their young, adding life to the picture and filling the air with their song from early dawn until sunset. From the uppermost twig is often perched the robin *(Turdus Migratorius)*, whose name is classic in the reports of the Secretary of the Society. The *turdus*, unchecked and undaunted, verifies by daily habits the charges preferred against him, and undoubtedly will long survive the annual clean cut of the accomplished pen and "lamb-like character of the Secretary."

With the progress of civilization, of wise thrift and good taste in embellishing grounds, both public and private, trees termed ornamental can be made to form a conspicuous feature, which must be ever prominent, where their selection and planting has been carefully studied, and made by graceful effect to fit the situation.

The variety of Ornamental Trees and Shrubs that thrive hereabout, is so large that we can but briefly touch even the most desirable, in a paper for a half-hour. It is found that many trees and plants that were considered but half hardy, thirty years ago, are becoming acclimated and are now able to withstand the most severe temperature. But I will confine this paper to such as have been found to thrive upon my own grounds, in this latitude; fully comprehending, that, as time goes on, valuable acquisitions will be made to the present number. But let us not wait for time, rather availing ourselves of the wonderful variety nature has given us, as her best work, for beautifying lands of all descriptions or localities.

In speaking of Ornamental Trees, the question occurs, what well grown, and furnished, tree is not ornamental? The trees usually termed ornamental are the non-fruit-bearing trees.

Prominent among these are the Maples *(Acer)*, in their variety especially conspicuous all over New England, as well as prominent in Central Massachusetts.

The kinds found to thrive hereabout are the Sugar, Norway, Red, White, Silver, the several cut-leaved sorts; and the recent acquisitions from Japan are very ornamental. In fact, the whole family is one of great beauty; and, as deciduous trees, are in the front of the ornamental class, and some of them are found to thrive in almost all soils and situations.

The Elm *(Ulmus)*, is for some situations highly esteemed

as a shade tree. The whole family are long lived; but the American Elm may justly be termed the king of the family. The Slippery, English and Scotch, all of them thrive here and make fine trees for streets; I mean those streets of sufficient width for their development; also for large grounds where room enough can be had for the full development of its graceful form and sturdy trunk.

The Oak *(Quercus)*, abundant in the pastures and forests, sometimes, but too rarely, adorns private and ornamental grounds. There are, however, a few exceptions where the Oak is prominent, holding sovereign sway; and few trees are more stately or produce better ornamental effect. The indigenous sorts are White, Yellow, Swamp, Red, Chestnut, &c.; all very ornamental.

The English Oak, of several sorts, is found to thrive here, with good care, even better than the natives. As an ornamental tree, it must be ever prominent as a distinctive feature in the landscape, either on elevated or undulating grounds. Where single specimens are given time for maturity no other tree is to be compared with it, in its great variety of beauty, changing with the seasons from the delicate bronze of the opening leaf, to the deep and glossy green of summer, and the gorgeous colored tints of the autumn. The foliage remaining on during the winter adds picturesqueness to the variety of beauty of the winter scene. The seeds of the Oak, well known as acorns, are in some varieties very ornamental, and germinate and grow readily when planted.

The Ash *(Fraxinus)*, is indigenous hereabout; but the White is most prominent. It produces a fine effect in streets; and on extensive grounds, in groups, when viewed from distant points, it has an upright gracefulness, and produces fine effects, in contrast with other trees. The leaf comes out late in the spring but turns in early autumn to a soft purple tint, remaining for some weeks in fine contrast with the green of other leaves. The White Ash is especially valuable for its wood, and transplants readily.

The Walnut *(Juglans)*. There are several sorts prominent as ornamental trees. The Hickory, the Black Walnut, English Walnut, and Butternut. The Hickory, although difficult to transplant, unless often moved when young, when well grown makes an elegant and stately tree. The Shellbark, in its luxuriant leaves and shaggy bark, has a distinct type and holds a place in fine harmony with other trees. Its fruit is abundant, very sweet and of delicate flavor; it is ever the favorite tree of the boys,* when the fruit is ripe.

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* Girls also (?) E. W. L.

The Black Walnut, a fine vigorous tree, with spreading habit, the lower branches reaching out in a horizontal position, the leaves some 12 or 14 inches long with six or eight pairs of leaflets on each side, and swaying gracefully in the breeze. This is also a fruit-bearing tree, with large round nuts, not as delicate in flavor as the shellbark. The Black Walnut ought to be more extensively planted, as its many desirable features recommend it for an ornamental tree, when it can have ample space.

The Birch *(Betula)*, is a tree of rare and graceful beauty. The most prominent are the English, Weeping, the Canoe, White, Black and Yellow. Some of the birches being so common, lining the very road-sides, and occupying almost all waste spots, the variety has not been as extensively planted for ornament as it deserves. Perhaps the first place should be accorded to the European ; with its shapely form, and the graceful sweep of its pendulous branches, with its beautifully cut and varnished leaf and with its snow white bark, it must rank Queen of the Birches.

The Canoe Birch about here is in its southern limit, and does not attain the same diameter of trunk that it does in more northern regions. I have watched the growth of one specimen for nearly forty years, until it is now almost two feet in diameter ; its clear white papery bark giving a marked effect to the trunk, well furnished with branch and leaf. Where it flourishes it is truly a picturesque tree, of spreading graceful form, and its cultivation should be encouraged.

The Black Birch, or Sweet Birch, is the very first of the family that the boy learns to recognize, as he bites the fragrant bark. The tree has many fine features and is beautiful in its golden racemes, and airy leaf ; it is deservedly finding its way from the wild to cultivated grounds, and thrives therein.

There has been recently introduced, I believe from England, the Purple Birch. Both bark and leaf are intensely purple, promising to cope with the Purple Beech. With purple tint and glossy leaf it is conspicuous. I am unable yet to describe its habit, my own being quite young but of thrifty growth.

The Beech *(Fagus)*. Among the larger trees that may be recommended for ornamental planting, the Beech, in its variety, is worthy of more elaborate consideration than this paper will permit.

If I ever envied a tree, the property of another, it was the Purple Beech ; and I am not prepared, either for the lawn or for a conspicuous position in any grounds, to assign the Purple Beech a second place. It is said to have had its origin in Germany. When properly grown it has so many desirable characteristics that no grounds of any pretensions should be without it. I know

of a tree where the lower branches extend fifty feet. In early spring, when the leaves are intensely purple, and when agitated by wind, on strong sunlight, its brilliancy is unequalled by any of the tree family, and would vie successfully with any of the gorgeous tints of other trees in autumn.

The Fern-Leaved Beech is a tree conspicuous for the clean cut and airy lightness of its foliage; a very pleasing tree to the cultivated eye, and sure to be marked in any collection as one of nature's best works in the beeches. Its growth is slow unless planted in good soil, when it makes a vigorous growth.

The American Beech, found more or less over our northern regions, is much admired for its singularly neat and airy foliage, which often adheres to the branches during the winter. When in groups they are delightful in their many excellent features; always in full foliage, as but few insects injure them.

The Lindens *(Tilia)*, once so popular, are now much less planted. The American, commonly called Bass, makes a stately tree, with large leaf; and in July their flowers fill the air with delicate perfume.

The Magnolia: A few of them thrive here and are among our most beautiful trees. The Magnolia *Acuminata* grows perfectly well, is profusely clothed with large green leaves, and in June flowers; the fruit resembling a small cucumber.

The Magnolia *Tripetala*, after the first few seasons of growth, is found hardy, its beauty being in its very large tropical leaves, with large white flowers six or eight inches across.

Magnolia *Soulangeana* and *Conspicua:* But few, if any, trees are more ornamental than these, when in bloom; being filled with white and pink flowers, four or five inches across before the leaves unfold; they are particularly well adapted to small grounds.

The Tulip Tree *(Liriodendron tulipifera)*. The Tulip is a great favorite on extensive grounds, and being of rapid growth soon becomes a tall stately tree, with leaves of peculiar cut and freshness. The flowers open late in June, are fine, tulip shape, of greenish yellow tint. I have seen trees near Philadelphia with trunks nearly four feet in diameter. They are, by the way, a difficult tree to transplant. Then I admire the Gingko or Salisburia with all its foreign caste, its Oriental primness and precise regularity of growth and habit, with peculiar shell-like leaves of pea green. Seemingly bearing the stamp of its native country, patient and polite.

The Larch *(Larix)*, is considerably planted as an ornamental tree, its straight stem, pyramidal shape, rapid growth, and when old its value for timber, render it desirable. It is also a good

tree for shelter, its abundant branches and fine twigs breaking the force of winds.

The Larix *Leptolepis*, or Japan Larch, is quite likely to prove a valuable acquisition. Though not as rapid in growth as the European, it is better furnished and more symmetrical; the foliage is longer, and very golden in autumn. It is quite likely to prove the Queen of the Larches.

There are other deciduous trees worthy of planting, which I can only attempt to designate by name. Among these are the Oak-Leaved Mountain Ash, Catalpa, Cut-Leaved Alder, Horse Chestnut, Kentucky Coffee Tree, Kilmarnock Weeping Willow, Weeping Beech, Weeping Ash, Wier's Cut-Leaved Maple and the Purple and Gold Leaved Maples.

Nor will I attempt to elaborate upon that beautiful and indispensable class of trees known as Evergreen, viz: The Pines, Spruces, Cedars, Cypress,—leaving them for consideration in some future paper.

It is with diffidence that I now approach the subject of Flowering Shrubs, after the elaborate essay a few weeks since. Among the older ones is the *Althea*, proving a hardy, free-blooming shrub in autumn. When planted in groups it produces a fine effect. There are several sorts, giving variety of color, for late summer and autumn bloom.

Asia.—The Flowering Almond, the rose and white are among the earliest to flower, and in great profusion; closely allied is the comparatively new *Prunus Triloba*, much stronger in growth and of great excellence; the flowers are pink, opening before the leaf; it proves hardy and is a very ornamental shrub.

Europe and Persia.—The Lilac is a large growing shrub, that rarely if ever dies,—at least I have never known one to die. When in flower it has no peer for beauty and fragrance.

China and Japan.—The Deutzias are an exceedingly favorite family; no shrubs are more profuse in bloom, and none more hardy.

I mention the Deutzia Gracilis, Crenata, double flowering white, and white tinted with pink; the Scabra and Fortunii are strong growing, with large cupped white flowers in great profusion; they are readily grown from seed.

The Colutea, indigenous on Mt. Vesuvius, is a fine shrub, with delicate foliage, and yellow flowers; the seeds are inclosed in a bladder, and in themselves are curious and ornamental. The leaves are pea green and remain unchanged until late autumn.

Europe.—The Daphne Mezereon is a small shrub flowering early; the Cneorum is evergreen, flowers in clusters and is very fragrant.

The Forsythia is one of Fortune's introductions from China. It withstands most winters, and in early spring has yellow bell-shaped flowers in great abundance.

The Japan Quince, *Cydonia Japonica*, is an old and well established shrub, full of bloom in early spring. There are several with different colored flowers.

South.—The Silver Bell *(Halesia)*. A very handsome shrub, blooming in May, having white bell-shaped flowers.

Natives of South Atlantic and Pacific States.—Japan.—Syringa *(Philadelphus)*. There are several sorts, prolonging the season of their bloom of white flowers; they are mostly fragrant.

Spiræa, are among the larger families of shrubs, some are very beautiful. They are in bloom from spring to autumn, giving very great variety of leaf and form, and color of their flowers. I find a few of them tender, but most sorts perfectly hardy. Perhaps no greater variety of bloom can be found in any one family.

China and Japan.—*Diervilla*. The Weigela, another of Fortune's China flowering shrubs; there are several sorts, and all are very beautiful. It is regarded as a great acquisition and approves itself well over a large extent of territory.

Hydrangea Paniculata Grandiflora;—from Japan, where it is said to attain a height of 12 feet, and perhaps is second to no other flowering shrub in its season. It is being widely disseminated and giving universal satisfaction. The flowers are sometimes more than 12 inches in length, remaining in bloom a long time, changing from white to pink and bronze; grows well in the shade.

Ghent Azaleas are found hardy and their great variety embraces flowers of every shade of color. Their effect, when planted in groups, is very fine. They are easily cultivated and deserve more attention. A soil of sand and peat, with leaf mould, suits them.

Azalea *Mollis* is of more recent introduction from Japan, their trusses of flowers are often as large as those of the Rhododendron, are mostly self-colored, with the softest delicate tints. This is regarded by many who are competent to judge, as the best hardy flowering shrub cultivated.

The Rhododendron, an evergreen shrub, indigenous to this country, which of late is receiving considerable attention. There have been at the rooms of the Massachusetts Horticultural Society forty-eight varieties exhibited by one grower; in their variety, perhaps no flowering shrub is more showy in their season of bloom; when under favorable circumstances it attains a height of 10 or 12 feet. But it is a plant that, to thrive, requires very

favorable conditions; and they are often productive of failure and disappointment.

There are many climbing flowering plants which are desirable to cultivate, making a good fit in many places; among them are Clematis, in great variety, Akebia from Japan and proving hardy, Wisteria, Trumpet Flower, Honeysuckle, &c.; and I could name many more, but forbear.

With the advance of the genial season those who love and cultivate trees and flowers will be ever alive and rejoice in the swelling bud and bursting bloom, proclaiming the season of flowers is at hand. Even the habit of finding enjoyment in these beautiful plants is worth much; its scope is further than the eye can reach, or the reason appreciate and understand.

They are worthy of assiduous and devoted care, and will largely contribute to the enjoyment and happiness of those who cultivate them.

Mr. James Draper said the essayist had been so careful as to leave no ground for opposition or discussion. He said wide ground, much study and deep enthusiasm are needed to follow in his footsteps. The common grower wants to know what he can plant on his little ground. In Maples the Rock stands first; the Beeches deserve more attention; the American white is good everywhere, and the purple variety deserves all the praise it has received. In planting he advised the setting of small rather than large trees. He also asked more attention to the White Ash, a row at the Rice estate on Grafton street being cited as a sample of beauty. He commended the compliments to the Tulip tree, and said that here, too, small trees succeed best; the suggestion for planting it on a board is a good one. The Althea, if grown in very rich soil, is hardly a hardy shrub. The Forsythia is not hardy in all its varieties, but some will do well. The Catalpa has not done well here. He would give a caution against the Irish Juniper; it is pretty and attracts every one, but it will winter-kill one season in three. But there are enough evergreens which are hardy. Of climbing vines, he spoke of the Ampelopsis Veitchii, a closely clinging vine which adheres to a common brick wall, as perfectly hardy. The Magnolias, he said, have the same habit of root with the Tulip tree, and need careful handling when out of the ground.

Mr. Hadwen said of the Althea that it is usually hardy after planting out on high grounds; it should be cut back when planted out; after it is once established it is as stable as the lilac; many shrubs once called tender are now hardy. The Scotch Laburnum

is an instance of this. The Colutea is another; it may perish at the extreme tip of the twigs, but its flower and seed-vessel alike make it desirable. The Catalpa, of a hardy variety, is not known here, but there is a tender kind which fails here; the Speciosa is the one to plant. The Ampelopsis Veitchii is a new Japan ivy, which is winning friends everywhere; its rootlet is like a fly's foot, and will stick anywhere; it will cling to anything. A good specimen may be seen on the house formerly occupied by Hon. C. B. Pratt, corner of Main and Valley streets.

Mr. W. W. Cook said his observation is that the Althea is disappointing only on rich soil; on dry, rather poor soil, it will stand, not growing so fast but that the wood can ripen. The Wisteria and the Trumpet-flower also demand a dry spot.

Dr. Flagg spoke of the Virgilia as another very desirable tree. He expressed surprise that the Althea is a tender shrub; he had known it all his life as a sure grower. He advocated the developing of native trees and shrubs, rather than the eager introduction of new sorts. He also favored the English elm rather than the American.

The Chairman said the Althea grows on his grounds with entire success. He thought for a street tree the Elm can not succeed here; it splits down easily, and there are but few really good trees of this variety to be seen. He could remember when Front street was planted with Elms, but they are now not very handsome. The Rock Maple, the Beech and the White Ash are more desirable, from their better habit of growth. These three are enough.

Mr. George S. Coe, of Grafton, asked about the Weeping Elm, a variety with a firmer habit of growth than those on Front street. Mr. Hadwen said there are several excellent varieties which have not been named. The Elm will develop if space is given, but city streets are generally too crowded for their success. The Lancaster Elms seem to be different from those in Worcester.

Mr. Cook said another objection to the Elm is that it spreads its roots so far as to prevent any other vegetation.

Mr. F. M. Marble asked for the favorable conditions for the Rhododendron. Mr. Cook said he had grown Rhododendrons fifteen years; they were protected in the winter with pine boughs. The soil is inclined to clay; peat and sand was mixed in, and the shrubs always grew well and bloomed freely. He thought they need protection here in the winter. If sheltered from the sun by evergreen trees and shrubbery, no other shelter is needed. It will not do to wrap them up in straw; they only need shading from the sun.

Dr. Wakefield of Leicester was introduced and spoke of his

interest in the discussion. He approved the objection against the Elm on account of its spreading roots; it will go a dozen rods to find a rich spot, and will steal whatever it can reach. An Elm, properly placed, is a thing of beauty, and will withstand storm and ice; it is only in cramped positions that it fails from these causes.

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society:

In accordance with the custom of the Society, the Librarian herewith submits his annual report; and in so doing, he feels assured that the members of the Society will find satisfaction in the fact that the Library continues to be used more extensively from year to year; the number of books issued during the year just closed numbering 440, which is an increase of 35 per cent. over the year 1879 and 150 per cent. over the year 1878.

Increased facilities for consulting the Library have also been furnished by the introduction of a Library Table which meets a want long felt; and judging from the favorable comments that have been made in regard to it and from the numbers who have already patronized it, the Librarian feels warranted in predicting a much larger use of the Library in the future.

Besides the usual additions by purchase of books, your Library has been further increased by the very munificent gift of 64 volumes of valuable works upon Horticulture and Agriculture, from the heirs of the late Hon. D. Waldo Lincoln, a list of which is here given:

The Working Farmer; vols. 1 to 6; 1850 to 1856; by James J. Mapes.

Downing's Horticulturist; vols. 1 to 7; 1846 to 1852; by A. J. Downing.

Gardener's Monthly; vols. 2 and 3; 1860 and 1861; by Thomas Meehan.

Transactions Massachusetts Horticultural Society; vol. 1.

The Fruits of America; vol. 1; by C. M. Hovey.

The Horticulturist; vols. 8 to 11; by P. Barry.

Hovey's Magazine of Horticulture; vols. 1 to 5; Third Series; 1855 to 1859.

Hovey's Magazine of Horticulture; vols. 1 to 3; Fourth Series; 1860 to 1862.

The Annals of Horticulture; 1846 to 1850.

The Flower Garden; 1856; by Joseph Breck.

Studies in the Field and Forest; 1857; by Wilson Flagg.

The Pomological Manual; 1832; by Wm. R. Prince.

The Fruits of America; 1859; by A. J. Downing; revised by Chas. Downing.

Chemical Field Lectures; 1853; by Dr. A. J. Stockhardt.

A Practical Treatise on the Culture and Treatment of the Grape Vine; 1848; by J. Fisk Allen.

A Practical Treatise on the Construction, Heating and Ventilation of Hot Houses; 1851; by R. B. Leuchars.

The Farmer's Dictionary; 1846; by Dr. D. P. Gardner.

The American Farmer's Instructor; by F. S. Wiggins.

Pomarium Britannicum; an Historical and Botanical Account of Fruits known in Great Britain; 1827; by Henry Phillips, F. H. S.; third edition.

Our Neighborhood, or Letters on Horticulture and Natural Phenomena; by E. Bliss; 1831.

An Introduction to Systematic and Physiological Botany; by Thomas Nuttall; 1827.

Familiar Lectures on Botany; Almira H. Lincoln; 1831.

Thirteenth Annual Report of the Secretary of the Board of Agriculture of Massachusetts.

Fruits of America; vol. 2; 1856; by C. M. Hovey.

Gardener's Monthly; 3 vols.; 1862 to 1864; by Thomas Meehan.

The Magazine of Horticulture; 8 vols.; 1844, 1845 and 1863 to 1868; by C. M. Hovey.

The Horticulturist; 8 vols.; 1857 to 1864; by Smith & Mead.

The books added to the Library during the year by purchase are as follows:

The Window Flower Garden; by Julius L. Heinrich.

Dictionnaire De Pomologie; by André Leroy.

Revue Horticole; 1877 and 1878.

Annual Report of the Comptroller of the Currency; 1879.

Department of Agriculture; Reports for the years 1867, 1868, 1872, 1873, 1875, 1876, 1877, 1878.

Ferns of North America; by Prof. Eaton; parts 22 to 27.

Native Flowers and Ferns of the United States; second series; vols. 1 and 2 complete.

Scribner's Monthly Magazine; Nov, 1879, to April, 1880.

The Illustrated Annual Register of Rural Affairs; 1880.

Vick's Illustrated Monthly Magazine; 1878 and 1879.

Floral Magazine; Figures and descriptions of the choicest new Flowers for the Garden and Conservatory; by Richard Dean; new series; 1879; large 4to.; 48 large colored plates.

Curtis' Botanical Magazine; vol. 35; by Joseph D. Hooker.
Journal of Horticulture; vols. 36 and 37.
Agriculture of Massachusetts; 1879 and 1880; by Chas. L. Flint.
Michigan Pomological Society; 1879.
Natural History of Plants; vols. 5 and 6; 1879 and 1880; by Baillon.
Success with Small Fruits; 1880; by E. P. Roe.
The Garden; an Illustrated Weekly Journal of Gardening.
The Gardener's Chronicle; vol. 13; 1880; weekly journal.
The Agricultural Gazette; an Illustrated Journal for Farmers; 1880.
The Villa Gardener; 1880.
The American Agriculturist; vol. 39; 1880.
Gardener's Monthly; vol. 22; 1880; by Thos. Meehan.
Country Gentleman; vol. 45; 1880.
Vick's Monthly Magazine; 1880.
Wild Flowers of North America; with Illustrations from original Water Color Paintings; by Isaac Sprague; Text by Prof. Geo. L. Goodale, M. D., of Cambridge; parts 1 to 12.
Flore Des Serres Et Des Jardins De L'Europe; Tome 22; by Louis Van Houtte; 1877.
The Book of Ensilage; by John M. Bailey; 1880.

All of which is respectfully submitted.

CHARLES E. BROOKS,
Librarian.

HALL OF FLORA,
November 3, 1880.

ANNUAL REPORT OF THE SECRETARY.

To the Members of the Worcester County Horticultural Society:

If ever the Members of a Society might justly indulge in mutual felicitations, surely those belonging to the Worcester County Horticultural may do so at the close of their latest official year. With numbers augmented; with action animated by a fervent, if discreet enthusiasm; with the burden upon our financial state continually lightening; with our Hall in sound repair, in popular demand, and of steadily increasing value; is it not our right to claim due credit for a proper use of the talent committed to us? Have we not, by precept and example, "advanced the Science" of Horticulture? Have we not, by Lectures and Discussions,—free to all, without favor or price; by Exhibitions equally open, of choice specimens of Flower or Fruit, "encouraged and improved its practice"? We have no quarrel with other branches of investigation: with the various, diverse methods wherein the human mind wanders, often losing itself, in search of truth. Every fact in Natural History is of aid to the inquiring Horticulturist. What Insects are predaceous and what beneficial? What Birds are frugivorous? and which, if any sufficiently insectivorous to compensate for their conceded mischief! These are questions in whose apt solution we have a deeper interest,—that of the pocket,—than those to whom they are but the problem of a leisure hour. The cultivation of the Earth commenced in a Garden. Thither, let us trust, as our knowledge of good and evil pefects itself, it will revert. Then,—when the spade shall supplant the plough; when exact industry shall succeed wasteful toil, and the careful harvest of an acre surpasses the slovenly yield from large fields; all shall be satisfied, each shall have enough

and to spare, every man shall pluck from his own vine and fig-tree, Nature itself shall bloom and bourgeon; and in that millennium, where premiums are unknown and committees cannot intrude, the Horticulturists of Worcester County shall recognize Eden regained.

Your TRUSTEES decided, at their Annual Meeting, A. D., 1879, to hold a series of meetings, upon successive Thursdays throughout the winter, then imminent, for the consideration of matters affecting Horticulture in its manifold and multiform relations. The duty of selecting suitable topics; and of obtaining competent persons to deliver prefatory essays; was at the same time delegated to the Committee of Arrangements and Exhibitions. The list of topics is recited, here, for permanent record, and to avoid future, vain repetition:

A. D. 1880.

January 29.	Exhibiting and judging Fruits and Flowers.
February 5.	Manures and Fertilizers.
" 12.	Growing and Marketing Small Fruits.
" 19.	Window Gardening and Winter Flowers.
" 26.	Out-Door Flowering Plants.
March 4.	Orchard and Vineyard Fruits.
" 11.	Does Horticulture Pay? And How?
" 18.	Trees, and Shrubs, for Ornamental Purposes.

The attendance at those meetings was large, sometimes thronged; and always such as to excite the astonishment of gentlemen from the metropolis, who seemed not quite aware of the attractions of Horticulture to people with whom it was not merely a holiday pastime. The audiences, composed in fair proportion of either sex, came to learn from those who might be presumed masters of their chosen subjects; and, in most cases, it is believed that those hopes were not disappointed. Inquiry was challenged; and discussion ensued, when interest had been aroused. Conflict of opinion, where it does not degenerate into political or religious bigotry, is ever wholesome. The air is clarified; prejudice is dissipated; novel truths find wider acceptance; and the faith, delivered to and jealously guarded by the saints as an exclusive possession, is no longer rejected by the sinners. The great Apostle of Democracy;*—of perhaps the most philosophical

* Thomas Jefferson.

mind among all the statesmen hitherto produced in our Republic; boldly declared that "Error may be safely tolerated, so long as Reason is left free to combat it." In the informal discussions among our Members there must, of necessity, be much crudity of thought and even more incertitude or inelegance of statement. Sometimes they are weighted down to bathos by ponderous expression; and then again they provoke to levity, even as the sparks fly upward. But, throughout all, is current the clear stream of Truth; now diverted; at times obstructed; occasionally roiled for the wolf by the lamb at the fountain-head; nevertheless rippling over the rocks, sparkling in the sunlight as it eddies along, swelling always in its course and finally merged in the ocean of serene and undisputed faith. We could not anticipate and did not secure unanimity; but curiosity was appeased; utter ignorance informed, or put upon inquiry; and the average will or craving for instruction satisfied by such a harvest of experience as is seldom threshed out from similar sheaves.

The largest measure of credit attaching to the inception and prosperous conduct of that series of meetings belongs to *Vice-President* HADWEN. He was indefatigable in his efforts to procure essayists of knowledge and worth; scouring the State in the search for them; allowing them no respite until they consented to his request; and seldom, even then, relaxing his grip until he had seen them fairly inside the Hall of Flora. Without his earnest co-operation, it is not too much to assert that the whole effort must have measurably failed. This tribute to his efficiency and zeal is but just. And it is paid, all the more heartily, that justice is not always awarded in this world;—and he might not elect to await it—hereafter!

Throughout the entire period of time, occupied by those Essays and Discussions, mind and body were alike active and usefully employed. And baby hands, or feet, as your Secretary can gratefully attest, bore witness during the wintry days to the deft skill of the nimble fingers that had kindly supplied their tiny covering. The hum of the spinning-wheel, in our households, may be hushed forever. But the Knitting-Needle! fit emblem

of feminine tenacity and thrift; shall it not flourish and multiply so long as woman buds and blooms!

The practice of holding Weekly Exhibitions, adopted by your TRUSTEES as a settled policy, after mature deliberation, is justified by its results. The examination of specimens, whether of flower or fruit, was somewhat hampered by the formality of set meetings in the earlier months of the calendar year. But, of the excellence of those specimens, shown in complete maturity, there could be but one estimate among competent judges. The interval between those Exhibitions was not so wide as to interfere with or prevent comparison; whereby alone can the gradual or intermittent process of development be noted. Ampler opportunity is thus afforded for the introduction of new varieties by the pioneers in their discovery and cultivation. It is only the simple truth to state that never, since the organization of this Society, have our Halls accommodated such brilliant and tasteful displays of Flowers and Plants. A pretty rigid enforcement of the Rules,—established in the interest of all,—has tended to educate the eye and guide the hand; thereby conferring an ultimate benefit upon some who might at first object to the exaction of such unbending conformity. Yet,—if "Order is Heaven's first law,"—it surely should not be our last. Precision of definition or requirement tends to the education of crass ignorance and equally to the refinement of trained taste; without which, in realization or prospect, those who, like your Secretary, have inhaled from infancy the sweet fragrance of bud and blossom, would not suffer their names upon the Committee. For, of all things utterly dreary and desolate, that which must be deemed forlorn, beyond rivalry and without parallel, is a cultivation that promises no return;—a harvest whose apples have no savor but of Sodom.

Nor were you deprived of the chance of contrasting what you had gained with—that which you had chosen not to retain! The *New England Agricultural Society* held its usual Exhibition of Flowers, Fruit, Photographs, and Parlor Organs, in the early days of September, which was skilfully organized and profitably conducted. But you must have noticed that, save for the financial results, the success of even such an Exhibition is scarcely commensurate with the enormous waste of time and toil that it

imperatively requires. Any close observation of it, in detail, becomes impossible from its very bulk. Objects that would be worthy of notice are lost in immensity; and the commonplace attracts attention because of its omnipresence. Committees are obtained with difficulty to undertake a task of such appalling magnitude; and, when obtained, find it impracticable to concentrate articles of merit; or to approximate, at all closely, their relative degrees of excellence.

Our own Weekly Exhibitions, rigidly confined to specimens of unquestionable superiority, latterly taxed the whole time and strictest attention of their Committees. Faith that there would be something worth seeing prevailed in the community; and our Halls were thronged, as never before, by an eager and interested crowd of witnesses. It is a pleasure, in itself, to labor for such a consummation. We have now a plane of achievement wherefrom to measure. Our aim may be full high advanced; but, with a continuance of such enthusiasm and zeal as inspired our Members, during the season just past, it cannot be impossible of attainment, however exalted. Shall we content ourselves with aught less than absolute excellence? It rests with yourselves, Gentlemen and Ladies of the Society! to determine.

The unusually mild Winter, followed by a Spring dryer than ordinary, was favorable to the development of every form of Insect-Life. Then, if ever, was the time for the Birds,—objects of cockney or girlish adoration, to vindicate their fair repute and show some good reason for a legalized existence. The whole art and science of Chemistry is exhausted to reduce, in whatsoever measure it may, the infinite swarms of our Insect-Foes. No one stops to reflect that arsenical poisons may prove no more deadly to the *Doryphora decemlineata* than to the parasite which saps his life. No one appears to care whether the *Turdus migratorius* impales upon his merciless beak insect-friends, or foes, of man. The country is kept in a perpetual turmoil because Four Million Negroes will not—as did Three Million White Men, a century since,—hoe their own row! Agitation is ceaseless because Woman has not her Rights,—Heaven save the mark! Man making no perceptible fuss as he packs the burden of his wrongs on a back galled to the quick. The Earth grows fat, and laughs, with her

bounteous harvest; and we are complacently pointed to the countless sheaves, or profusion of fruit, as the direct consequence of Republican election or Democratic free-will and foreknowledge absolute. The very hairs of our head are numbered and the matter of least moment to man is of some account in the Divine economy. But the caucus—the stump,—and the fat snug sinecure, are the successive steps and ultimate measure of Yankee concern;—which finds but slight incentive in an occupation that developed a Cincinnatus,—a Phocion,—a Washington! And the politician,—in the General Court,—is full-fledged—that is all! He has moulted; his feathers are glossier and newer. But, for any benefit to the Commonwealth, he might better have left a vacuum; the abhorrence of nature would be the same in his presence or absence. The common concerns of life disturb not him; but rather who shall be gauger or tide-waiter, at the foot of State Street. Agricultural Education may perish for aught that he cares; it will be none of his funeral. During the canvass,—his hair will be full of hay seed. At the State House, where he finds himself misplaced by the chances of the political roulette, (a square peg in a round hole?) as the Horticulturist appeals to him for relief from legislation that discriminates *against* himself, he elongates his ears—the latest step in evolution,—flattered at hearing kindred tones in the raucous cry of the *Turdus migratorius* or the dissonant shrieks of his congener —the *felivox*.

Any one can compel or obtain a hearing,—possibly gain relief or redress,—save only Horticulturists, who would fain have the grain and fruit crops of the country protected from rapacity and waste. These Reports have steadily contended that the benefits claimed from the in-lawing of Birds,—assumed to be insectivorous,—are, if at all actual, grossly exaggerated. At the risk of exhausting your patience, I have translated an article from the *Revue Horticole*, wherein the writer tersely, effectually, it may be hoped finally, disposes of the whole shallow sentimentalism. Hereafter, with the bird as with the quadruped, let it be—"Root, or Die!" But listen to the French savant, as formulating his views, he declares that

"1st,—Birds are only gathered in flocks, greater or less, at the

periods of their migrations, in Autumn and Spring; that is to say when most insects are infinitely less numerous than during the Summer. At other times, they live in couples, usually scattered, but seldom in cultivated grounds; while insects invade in swarms the trees which they wish to attack,—the products of the earth of which they are foes.

2d,—Birds destroy enormous numbers of insects: but, of those insects, many are of no consequence; others are eminently useful; and the species actually noxious, compared with the aggregate, are so slightly reduced that the birds, though making a great consumption of these little creatures, aid us but little. *They even injure us*,—many of them devouring our fruits, as well as the grain sown in the earth, or harvested; and all of them destroying multitudes of insects that, as flesh-eaters or parasites, render us great service.

3d,—The insects whereof we have most to complain, are,—some large enough to defy birds; others (and these are usually the most formidable), too small to attract their notice; still others of too disgusting a flavor to excite their appetite; many are nocturnal, and conceal themselves by day, with that instinct of self-preservation which is as well developed among them as among the larger animals; or, keeping motionless, do not reveal themselves to the eye of the bird which easily detects and greedily pursues insects on the wing or in motion. Some live under ground, or in dwellings; all are endowed with a fecundity that astonishes even the imagination and which, in all cases, is such that man, in spite of his utmost assiduity and perseverance, even in garden cultivation, cannot relieve himself from them,—often cannot free his house from them,—may I not say—a single room in his house?

4th,—Caterpillars and worms,—the chief workers of mischief, usually live concealed under ground, beneath the bark of trees, in the depths of the woods, in the stalks of plants, in fruit,—in places that are inhabited. They are concealed or protected by silken webs and yield but a slight tribute to birds. Those which are developed in the open air, are generally bristling with a skin that repels attack; some are nocturnal and disappear before dawn; their very minuteness protects others.

When we reflect upon these considerations—the fruit of experience; when we would subject them to a rigid scrutiny, with the desire, if possible, of finding them unfounded; nevertheless without preconceived ideas and with the intention of knowing the truth; I doubt not that you will adopt my opinion and that even those who are most partial to birds will admit that they had not thought of all this. For myself I am so thoroughly convinced that I dare, without presumption, to challenge contradiction and to defy criticism.

But, you will say,—cannot the cultivator expect any help but from himself? I have already declared, at the outset, that the ability of man to contend with Insects is strongly doubted: and that it has been the inadequacy of his efforts, the careful observation of facts, which have forced this painful conclusion at the very time that there was

most faith in the efficacy of human intervention. Now,—when from all sides we are invited to the war upon insects; and Nature is ransacked to supply us with some means of defense from their ravages; I proclaim the impotence of man. And I say that,—happen what may, and generally speaking,—it is indisputable that man has not, from an Agricultural point of view, any effectual means of preventing the invasion of Insects, or of compelling them to fly—never to return."

With more, characterized by the same French charm and felicity of expression, that might be profitably repeated here, did time allow. You observe what stress is laid upon the fact, obvious to all save those who having eyes see not,—that Birds are omnivorous and not at all discriminating in their appetite. This position, so often assumed in these Reports, has been thoroughly demonstrated by *Professor* Forbes of Illinois, upon the pages of the American *Entomologist*:—

"Investigating the contents of Twenty-eight (28) Brown Thrushes (*Turdus rufus*), Thirty-seven (37) Cat Birds (*Turdus felivox*), and of Forty-one (41) Robins (*Turdus migratorius*), he found their food largely made up of insects. He carefully examined all those insects, and, knowing their names, character, and habits, discovered the hitherto unsuspected* fact that the family of Thrushes is inordinately destructive to *beneficial* insects. Of 150 Thrushes examined, 46 per cent. had taken those useful insects known as *Carabidae*; while of 194 birds of other families only 5 per cent. had eaten them," &c. &c.

We may be powerless against Insects, as the French savant declares: but the sense of impotence, as concerns them, should not make us so idiotic as to foster, by legislation, the health and long life of our natural foes. Beneficial insects have neither bloom, nor song, to commend them; yet, throughout their insignificant and outlawed existence, they cease not to toil and spin in our behalf.

In a reproof addressed, by one of the Minor Prophets to the People and Priests of Israel, for their manifold iniquities, he chiefly and bitterly denounces them for that "they have devoured their judges." In this Nineteenth Century, they are called Committee-Men; but, equally as in the ages before Christ, are those who devour them "hot as an oven." Speaking for the Floral Committee of this Society, it may not be impertinent to

* The statement is too broad. The "fact" had often been asserted, was always suspected, and, by *Professor* Forbes is at last demonstrated beyond peradventure. E. W. L.

say that while they can endure abuse, they do not hanker after it! The gentlemen whom you appoint to serve you, in such capacity, are presumed, from the mere fact of their selection, to be fit for their place. If not a too violent presumption,—might they not be credited with honesty of purpose and integrity of action? "To err is human;" and the Members of your Committees are but mortals. Nevertheless, spending hours at a time in an attempt to apportion strict justice to all concerned (can it be possible that this is what is least wanted?) they should be held exempt from the wanton imputation of corrupt decisions, or motives, at the bare prompting of individual chagrin. None would concede, more readily than your Floral Committee for the past year, that their superiors might be caught by going out into the highways and compelling them to come in. But the highways were not thus raked, for A. D. 1880; so that Flora, to establish her church, was constrained to choose her deacons, if not the whole congregation, from such material as she could find handy. They may not have been, it is true:

> "Sugar and Spice
> And everything nice:"

But neither were they

> "Rats and snails
> And puppy-dogs' tails."

Simply genuine men, and true horticulturists; of whom some flatter themselves that they know how to grow flowers, and others remember how flowers have been grown, for fifty years. Set against this the narrow conceit which leads each or all to fancy their own plants pre-eminent; confront a straight forward purpose with the passionate rivalries of sex; keeping ever in mind that, while there would be no excuse, there can be no occasion for partiality; and who will fail to exclaim with the great epic Poet of our Mother-Land,—

> "He that has light within his own clear breast,
> May sit i' th' centre, and enjoy bright day:
> But he that hides a dark soul, and foul thoughts,
> Benighted walks under the mid-day sun;
> Himself is his own dungeon."

Probably none of you would "work a free horse to death." But did you ever stop to think of the tasks that a Floral Committee must assume? In judging between exhibits, for instance, you insist that the specimens shall be "annual, biennial and all herbaceous." Your Schedule calls for a stand of "Annuals," exclusively. Perhaps you insist that a display shall consist of "distinct varieties." Now, it would never do for a Committee of the Worcester County Horticultural Society to confess themselves at a loss,—no matter how abstruse or occult the proposition. Yet so eminent a Florist as Shirley Hibberd admits his inability to determine what is a species! But hark! to a dozen women when, with assonant clack and as fast as their tongues can wag, they insist that their particular bloom in question is annual,—is herbaceous,—or is of a distinct variety! It seldom matters much if the Committee were unanimous and wholly positive; exceptions are taken, all the same, and a jury of appeal is quickly formed from sympathizing tales-women. Which, besides being entirely out of place, pleases nobody, earning neither premium nor gratuity.

Now in what way shall the mode of making awards be altered and improved? It is assumed that the terms of the Schedule will be defined in as clear and precise phrase as our language allows. There will not always be time to ransack the dictionary; as indeed there ought never to be any need of so doing. Besides,—the wells of English pure and undefiled are not invariably those wherefrom the botanist draws refreshing draughts. Noah Webster and *Sir* Joseph Paxton may not think alike; and how shall men define accurately, if they do not think correctly? Asa Gray and Leonard Worcester might live in the same town for years; but what would be the ordinary acceptation of a word to the *Lexicographer* might fail to convey any intelligible sense to the learned *Professor*. Horticultural terms, after all, like others, must be defined ultimately according to their common acceptation among those who use them. And, in their official interpretation, the decision of the Committee should be received as final,—without cavil or protest.

It has been suggested that awards might be made, in future, through a Committee consisting exclusively of females. Among

the incontestable rights of the sex,—in this Society, is that of becoming Members by compliance with a very simple condition. It is claimed that an advantage would follow upon such an entire revolution in our practice. For that the harmony which so strikingly illustrates the opinions and actions of Woman—in a collective capacity ; like the notorious concord among musicians ; would facilitate decisions and insure unanimity in their adoption. Your present Committee, exclusively male,—although its Members are upon the best of terms with each other, is generally divided in judgment. A change in its constitution, however radical ;—even to a degree that should involve the substitution of one sex for the other ;—might be worth the experiment, if simply to secure the absolute agreement of all instead of the rule by a bare majority. If it be objected that, all being competitors, no decision would be rendered, since each would naturally prefer her own ; the answer is obvious and sufficient, that competitors are not excluded from male committees. Also, that if men are content with a Committee constituted as suggested, women cannot possibly so impeach the character of their sex for fairness as to allege, if only by implication, that they are naturally incapable of framing an impartial award.

As little alteration should be made in the Premium-Schedule for Flowers, Plants, &c., as may comport with your better judgment. It is so much gained,—to have a definite and fixed proposal, under which Committees and Competitors have once acted, and whose terms have become reasonably intelligible. Most of the assignments for A. D. 1880, were found to be seasonable : a piece of extreme good fortune in a very exceptional year. But it is worth your serious consideration, whether it is in the interest of an honest and true Floriculture, longer to encourage what are technically termed Floral Designs ! If regarded merely as an arrangement of Flowers, a basket or bouquet better answers the purpose ;—and without hypocrisy. For the rigid forms of the glass-blower or iron-founder, however worthy of premiums at a Mechanics' Fair, constrain the eyes and hands too rigidly to meet the easy and graceful requirements of one who would display her individual taste. Let those who will impose a cross upon the mortal remains ! or attempt to anchor the fleeting soul !

If anywhere appropriate;—upon our tables, and in this Hall dedicated to the advancement of Horticulture, they are but meretricious ornaments. Be it our choice, rather, that nice sense of fitness which revels in the proper collocation of colors; in the gradual shading or strong contrast of tints so cunningly contrived, during the season just past, upon many a Thursday, in bouquet or vase, in basket or stand. Hang your harps upon the willows, if it so please you! But when you would display catkins in the Hall of Flora, leave the harps in suspense!

One of the ablest men that Worcester County ever produced, in an address before the Worcester *Agricultural Society*, long years ago, specified the sub-division of small towns (why not large, as well?) into countless religious societies, as a serious cause of their decline in prosperity and thrift. United,—they could keep in repair the roads, usually hilly and therefore costly to maintain, which led to and from the meeting-house: besides being able to make their worldly ends meet. Split into discordant and warring factions, their burdens multiplied as the strength to bear them became dissipated; so that, at length, man grew querulous from perceiving that his sieve would not fill, and God might well complain that He was robbed of the devotion of a whole heart. Worship grew languid, and Religion, under the mask of Theology, ceased to exert a wholesome influence. The warning of David Henshaw fell, like the Scriptural seed, upon stony ground. Sects continued to throw off swarms, and endured a starveling existence at the cost of the Towns which, from that day, have steadily receded in population and wealth. Yet the harvest multiplies: the laborers tramp around, with that barrel of old sermons, to fresh fields and pastures new, the response falling upon our ears, like a knell, in a monotone undying and never-ending,—The Heathen are at your own doors! Your Secretary had not supposed that there could be any strife between the disciples of Christianity and the devotees of Flora. Yet, what else save ignorance, which surely cannot be predicated of any one in this Commonwealth of Meeting-houses, could induce a prominent member of this Society to exclaim,—in response to a suggestion that the habit of cavilling at the awards of Committees would lead her to dispute the Final Judgment?

"The Final Judgment! What is that?" Was the statesman right? And must Flora indeed become a party to the irrepressible conflict between God and Mammon?

The question is often raised,—what is the difference between an Amateur and a Professional Florist? With a slight change of names, as from Florist to Gardener,—the subjoined classification of exhibitors by the *Gardener's Chronicle*, (Eng.), would appear to be sufficiently definite:

"As used in reference to country shows, the designation 'Amateurs' is understood to apply to persons who manage their gardens themselves, or with more or less assistance from a jobbing gardener or garden laborer, and who do not systematically derive pecuniary advantage from the pursuit. Gardeners, properly so called, are either nursery gardeners, market gardeners, or gentlemen's gardeners; the latter being employed by private individuals to undertake the management of their gardens for them.

No rule or description can be understood to be of absolutely universal application: but exceptional cases should be dealt with equitably, on their own merits, by the managing committee at the time."

Points are often mooted that seem to be suggested and influenced by a querulous spirit of casuistry. Such, and all others as well, are best settled by the application of sound common sense and a rigid impartiality.

The Small Fruits were displayed in their usual plenty, throughout the Summer. A protracted drought, during the period of bloom, materially diminished the crop of *Strawberries*. As they were ripening, frequent and timely showers came to the aid of the grower, enabling him to save a fair yield of exceptionally perfect fruit. The experience of each year but confirms the imperative warnings of the past that, for absolute success in the production of the Strawberry, irrigation in some form is indispensable. The plant may stand with its feet in water or it may luxuriate in the cool moisture derived from a heavy mulch. There may be patches of ground that, from peculiarity of soil or conformation, will answer the purpose naturally: but, as our vernal seasons have chanced, latterly, the average cultivator must have something else to depend upon than the fickle skies of May or June. It is a satisfaction to note that this truth is appre-

ciated; and is to be acted upon by some of our enterprising and wide-awake members.

Many new varieties have been introduced, in recent years; and a large number of them, A. D. 1880, upon our tables, illustrated the ambition of our local pomologists. Tastes differ so extremely that it can be hardly worth the while to descant upon their qualities. He who grows for the market may be trusted to look out for his own interest, and will require no guidance in determining what will suit the palate of his customers. But this Society does not consist of market-gardeners. And the large majority:—whether desirous of purchasing a choice kind, or of cultivating it themselves, at greater cost and uncertainty of any return; may well ask if aught has been developed, since the *Wilson* was discarded, to surpass the *Charles Downing* for general good quality and adaptation to circumstances, or the *Triomphe de Gand* and *Jucunda* for special excellence when treated in such manner as to meet precise requirements. May we not go further, and fare worse?

A paragraph in the *Gazette*, of this city, under date of June 12th, ult., will afford an inadequate idea of the demand for the Strawberry, as an article of food or relish, in Worcester and its close vicinity; while, at the same time, it indicates how vast are the possibilities, in the future, for the market-grower who will devote both patience and skill to his work and be content with a reasonable profit upon his investment:—

"Some idea of the popularity of the Strawberry as an article of food in this city, may be gained from the fact that the wholesale dealers during the last week have been handling from 7000 to 8000 quarts per day. This does not include any native berries, a considerable quantity of which have been picked and sold."

The most of that large quantity of berries were small, but partially ripened,—not over clean; and were certainly not commended to a taste, in the least degree fastidious, by the manner in which they were "deaconed" upon arrival. In fact, a person is not required to be fastidious, to feel qualmish over the employment of wooden tooth-picks in the selection of tempting specimens for the apposition of a top layer! However, the demand was greater than the supply—deserved. And the local crop,

as soon as it was fit to be gathered, controlled the market. Whether the price obtained was generally remunerative can only be inferred from the fact that those who have been longest, and most largely in the business, are extending rather than curtailing their operations. If our people could only be induced to regard and treat fruit,—the Strawberry especially,—as food, there need be no limit to the crop that would be wanted. Sometime, in a not remote future it is to be hoped, this truth will find common acceptance,—that the Esquimaux diet is only adapted to the Esquimaux climate: and that greasy steaks, from obese Short-Horns, are about the last morsels that a sensible Yankee should put under his waistcoat during our July suns. With plenty of choice Strawberries snugly tucked away, one may feel that same sense of absolute content which the fashionable lady remarked was unattainable from religious conviction, and as only to be experienced from the knowledge that she was perfectly dressed.

A recent writer upon "Success with Small Fruits," publishing, at excessive cost, a very excellent work in which much that was known before is shrewdly and well sandwiched between later facts and theories; when treating of *Raspberries*, remarks that:

> "The Fastolff, Northumberland Fillbasket, and Knevett's Giant, are fine old English varieties that are found in private gardens, but have never made their way into general favor."

That those varieties are not widely cultivated may be true enough. But has not the cause of that neglect been ignorance of their very existence? Your Secretary,—whose eyes are not always closed,—lived for years unconscious that there was such a berry as the Northumberland, although the late D. Waldo Lincoln was growing it, the whole time. After it had been transplanted to his "private garden," and its fruit been exhibited upon your tables, you are able to judge whether it "made its way into general favor." No finer display was ever seen than that perfect array of specimens from Olean street, part only as they were of the famous yield which, A. D. 1880, once more vindicated the soil and signalized the skill of our associate.* Ask

* Frank J. Kinney.

him, not whether the Northumberland Fillbasket has been, but if it ought to be, widely grown?

Again,—the same writer says, *currente calamo*, that "the Belle de Pallua and the Hornét are also French varieties that in some sections yield fine fruit, but are too uncertain to become favorites in our country." How, where, and by whom was that determined in regard to the Hornét? The experience, to the very contrary, of Grimes & Meyer, of Pittsburg, Pa., was quoted by your Secretary, in his latest Report; and also the testimony of Thomas Meehan to the enormous crops that he had but just seen in Germantown. Your Secretary cannot yet speak with thorough assurance: some degree of reserve becoming one in his official position. But he can at least state that he is so well pleased with the Hornét, so far as tested hitherto, that he has enlarged his plantation of it, slightly to the restriction of other approved varieties. Its history and character are described by Hon. Marshall P. Wilder, who writes of it, and of another variety, as follows:—

"BOSTON, Feb. 22, 1880.

EDWARD W. LINCOLN, Esq.,

My Dear Sir:—

Your kind favor is in hand. In regard to the Raspberries, Hornét and Souchettii Blanc (or White Transparent), I would state that I imported them from France, some Twenty years ago and have grown them ever since in my grounds. They were produced from seed, by Charles Souchet, near Paris, and put in trade about the year 1855.

The Hornét is a very strong, vigorous grower, and nearly hardy, but not safe here in some winters without covering. Its fruit is of the largest size, of a dark crimson color; its flesh quite firm and good, but not of the highest character. It is productive, not early, but remains a long time in the season of ripening.

The Souchettii Blanc, or White Transparent, is a healthy, good plant, and produces most abundantly. The color of its fruit is a very pale yellow, almost white; its form is long, thimble shape, parting freely from the bush at maturity; and, if not allowed to remain too long before picking it retains its shape and makes a handsome dish. Its flavor is not up to the Brinckle's Orange, but it is a very valuable variety for constant supply.

Most truly your friend,
MARSHALL P. WILDER."

The influence of the scion upon the stock, or conversely, of the stock upon the scion,—is it all a dream? Or a serious truth,

hitherto scouted, but deserving thorough investigation! Perhaps nothing is actually demonstrable. But did any one anticipate Gravitation until the apple fell at the feet of Newton? Our learned associate,—the Editor of the *Gardeners' Monthly*, copies from the *Gardener's Chronicle*, (Eng.):

"A White Doyenne pear, which had borne nothing but worthless, cracked fruit, for years, having three years previous all its upper branches grafted with Autumn Bergamot, the lower branches of the White Doyenne being suffered to remain. A sprout of Marie Louise, growing just below the point of union, was overlooked in the grafting, and bore, last year, clean, perfect fruit; all the rest of the tree being cracked and worthless as before."

And comments thus:—

"The most probable influence in accounting for this is, that this shoot had received its conditions of health from the Autumn Bergamot above it."

The conclusion is not inevitable, since a check in the development of a tree, imposed by the excision requisite for grafting, might of itself have such results. Yet what say other observers who, having eyes, see? Take the *Belle Lucrative*, for one case! almost destroyed by the Blight; but which, grafted with the *Washington*, has since betrayed no signs of disease, whether in scion or stock. And then the *Glout Morceau*,—double worked,—which yielded one good crop of superior fruit and thereafter blighted every year! Grafted again with the *Josephine de Malines*, there has been no blight since the fortunate union. Was this an example of the reflex action of the stock upon the scion? Or did the scion control the stock? Was it "Natural Selection,"—or merely an instance of—I don't know!

Yet again,—scions of *Glout Morceau* grafted into the *Lawrence*, have so far continued, for years in succession, to make a thrifty growth, without symptoms of disease in the wood of either variety. True,—unlike the other cases cited, this tree has not yet borne fruit. But are fecundity and the Blight inseparable? Does a tree ever blight that is barren? Or, unless and when it is set full of fruit! In which case, may not its decline and death be attributable to exhaustion, caused by a lack of proper nutriment in the soil, itself, impoverished by an unbroken

succession of ravenous crops? The poet represents the princely philosopher of Denmark as reminding his friend,—

> "There are more things in heaven and earth, Horatio,
> Than are dreamt of in our philosophy."

We planted our Pear-trees in virgin soil and gathered from them in profusion. Stable-manure, wood-ashes, soap-suds, refuse lime, or wool waste, one and all were returned to the earth, as fertilizers, when obtained; and, so long as obtained and used, there was fruit in abundance, while the Blight was unknown. After the waste of fertilizing substances, coeval with, or consequent upon the inroad of sewers, ensued emanations poisoning the atmosphere that, lethal to man, may well result in vegetable atrophy and death. We might have our choice of theories, were they worth election. Rejecting them,—how shall we decide the conflict of inconsistent facts!

After all, if a really good Winter pear should prove impossible of attainment, we must console ourselves with the knowledge that one, at least, of the Autumnal varieties is re-appearing, here and there, after a long interval, in more than pristine excellence. The *St. Michel*,—a tradition to most of this audience,—as lately shown from Linden *Street* and the Bloomingdale *Road*, more than justifies the faith of yore: and exemplifies, as nothing else could, so well, the final perseverance of pomological saints.

The growth of fine Pears, in this County, is not difficult: and there is no reason why a journal,* widely circulated among our farmsteads, should convey such an idea. "A sheltered location is of the highest importance. If it is not furnished naturally, then it should be done with close hedges, and high board fences. The land should also be thoroughly underdrained." It would be interesting to learn how many of the Members of this Society have planted their trees, or are now cultivating them under such conditions! An orchard, upon the promontory of Nahant, must not be suffered to stand for an example to the pomologists of Worcester. Boreas seldom breathes in zephyrs: but who shall say that there is not health in the blast, and that, cool and bracing, it does not benefit the tree, rendering it sturdier, and,

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* *The Massachusetts Ploughman.*

to some extent possibly, ridding it of insects? The Blight? we know not why it comes, nor what its origin. And yet the air, like the blood, stagnates when its motion is arrested; and stagnation at the last, is surely death. Why not as well attribute that mysterious disease to the stoppage or poisoning of circulation, impeded on every side by lofty buildings in villages and cities, whose erection and emanations check and infect the life-giving current of the atmosphere so that they can no longer bring "healing on their wings!" There had to be clearings to make room for the first Orchards; and it is now too late in the day to claim that Orchards should be girdled with a forest, as a pre-requisite to their successful growth. Have we not already enfeebled them by too much tenderness of treatment,—impairing the constitution of a tree, whose wood is of proverbial toughness; and whose longevity, where man has not sapped its conditions, exceeds memory if not tradition? Whose land,—of those who listen to me,—is "thoroughly underdrained?" Is it not the truth,—and the whole truth,—that a thrifty pear-tree, set in a hole sufficiently capacious; properly set at that; amply manured for food and well mulched for drink; will do for us what it did for our fathers? Return a larger yield of fine fruit than we can consume, at home; or find a convenient market for, abroad! "Hedges, high board-fences, and thorough underdrainage" for those who like; and who have more money than they know how to waste otherwise. Let us be content,—neither discouraging nor rejecting experiment,—if we can continue to produce, in the old way, such specimens of the *Comice*, *Duchesse*, and *Sheldon*, as were exhibited, in this Hall, on the seventh of October ult.

The *Duchesse de Bordeaux* commends itself, as a late keeper, and was approved as of at least fair quality, throughout the last Spring. That it will meet the demand for a late Winter, or Spring, pear,—may be doubted, because of its quality. On account of its unsettled rank; and to obtain information for some who desired it; your Secretary was induced to address a letter to Mr. Barry which, with his reply, and the comments that it made imperative, are incorporated in this Report:—

"WORCESTER COUNTY HORTICULTURAL SOCIETY.
HALL OF FLORA,
WORCESTER, MASS., Feb. 3d, A. D. 1880.

PATRICK BARRY, Esq.

Dear Sir :—

* * * * * * *

Have you settled down to a decided estimate of the merits of the pear—Duchesse de Bordeaux? I have the impression that it has not maintained itself in your judgment. With us,—after a partial, possibly too limited, test, it is assuming rank as a *good, Winter Pear.* That may not be extravagant praise,—you will perhaps say: but how many varieties—and what are they—will you venture to rate so high? I am often asked to recommend a Winter Pear. Since the Glout Morceau succumbed to the Blight, I will confess to being in a quandary. What do you advise,—and upon what grounds?

I remain, very Respectfully and Truly,
EDWARD W. LINCOLN,
Secretary."

"MOUNT HOPE NURSERIES,
ROCHESTER, N. Y., Feb. 10, 1880.

EDWARD W. LINCOLN, Esq.,
Sec'y Worcester Co. Hort. Society,
Worcester, Mass.

Dear Sir : * * * * * *

The Duchesse de Bordeaux pear is so difficult to ripen, and when ripe only *half*-melting, we have concluded to drop it. We have it now, fresh and handsome.

Have you Duhâmel du Monceau? At present moment this is fine. I will have one or two sent to you. Josephine de Malines is still in good order and is good enough. The tree is not quite the thing, but is sound and healthy. A good way to get it is to graft on a good grower.

We had d'Anjou at our meeting Jan. 28th, in the finest condition; also Winter Nelis, and Jones's Seedling, &c. I would advise you to get the last named, if you do not already have it. Lawrence too is excellent up to New Year.

Truly yours,
P. BARRY."

"WORCESTER COUNTY HORTICULTURAL SOCIETY.
HALL OF FLORA,
WORCESTER, MASS., Feb. 21st, A. D. 1880.

PATRICK BARRY, Esq.,

Dear Sir :—

The pears—Duhâmel du Monceau—were received in good order,

but did not impress us very favorably. Nor did it seem to us that it was *in them*,—so to speak. Of course we are familiar with Josephine de Malines and, especially, Lawrence: but, perhaps owing to the season, they have been out of date for a month. I presume that a proper fruit-room would preserve them.

I doubt very much if a first class Winter Pear exists. One, for instance, that would rank among pears, as among apples do the Baldwin, Roxbury Russet, and Northern Spy. But others ask for such a pear, and I was sure you would be familiar with it, were it in existence. The Beurre Easter was long since abandoned: it was so difficult to ripen.

A really good, late Winter Pear would be a 'handy thing to have in the house,' in those alternate years wherein the assurance of seed-time and harvest does not hold good for the Apple-Tree.

Excuse me for troubling you, and accept the annoyance as a penalty inevitable upon pre-eminence in Horticulture.

Yours most sincerely,

EDWARD W. LINCOLN,

Secretary."

The newer Pears are not yet perhaps fully tested. One of your TRUSTEES;—alike eminent at the Bar and in the Senate-Chamber, as well as *facile princeps* in a political convention; has likely pronounced the doom of one variety, by citing the adverse opinion of a lady. She thought of the *Souvenir du Congrés*, as is reported of the Englishman feasted at Nahant; who summed up the merits of a chowder by the pithy remark that "he had eaten worse things but—not much!" But our distinguished associate should remember that, although his fruit was elongated, its name was abridged: and that, if an adjective modified the character of the *Congrés Pomologique*, it could possibly qualify other assemblies of a similar genus.

Your attention was called to the *Bonne du Puits d'Ansault*, in the Report for A. D. 1879, because of its exaggerated nomenclature. The variety has been introduced, on account of its repute, by those who would "prove all things and hold fast to that which is good;" but it is not yet known by its fruits. Among those who are testing it, for your ultimate benefit, may be mentioned *Deacon* Lovell, of West Boylston, whose Grapes are slightly inferior to those borne from Eschol; and another, whose aspirations, if soaring to the title of Deacon, are forlorn

enough. Of that Pear,—there is the following description by those who disseminate it:—

"Bonne du Puits d'Ansault—André Leroy, 1865. medium size; melting; juicy, and very fine-grained. One of the finest in quality of all newly-introduced foreign pears; fully equal to the best Seckel. Tree moderately vigorous. September."

High praise that, from Patrick Barry! and what he should have weighed well before proclaiming so widely. "Fully equal to the best Seckel!" Have you ever seen such, or do you expect that you ever will? I put that upon record, here and now, that you may refer to it when the variety can be tested. For otherwise, how can you appreciate the keen perception of him who sees what eye hath not seen; or hold to his full measure of responsibility one who assumes that which no man hath yet proved!

Of "*Earle's Bergamot*," A. D. 1880, nothing further can be declared with confidence. Owing to some unexplained reason, it was not exhibited, at its maturity, by our associate,* who alone has perfected it, as he alone preserved it. In response to a request that he would furnish some specimens for your inspection, Mr. Townsend stated that he had none remaining,—as it had been gone for a week at least. Others of your members have scions growing; and from them a report may be expected in due time.

What shall we do with our Apples? is a cry that increases in intensity with each recurring harvest. Some have felled their Orchards:—an effectual, but quite idiotic method of avoiding the trouble that comes from having too much of a good thing. In Vermont, they have learned how to convert cider into jelly: the next step in the process, and one that is equally successful, being the conversion of the jelly into Massachusetts dollars. But palliatives only soothe: they are not remedies. Why shall we not find a market for surplus Apples as well as for Corn and Cotton! Already, a large commerce has sprung up, that promises ere long to make the Mother Country an eager customer for that staple fruit, as she ever was of those other essential products.

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*Mr. Velette P. Townsend, of Quinsigamond Village.

A late newspaper item represents one of our *Vice-Presidents** as filling an order, for apples, from Florida. Some forty (40) years ago, the late *Gov.* Lincoln shipped a barrel each, of the Baldwin, and Roxbury Russet, to a son, in the Federal Army, who was then stationed at Tampa Bay. They were wrapped separately, packed with care and tightly; and were received in a perfectly sound condition. While the shipment of our Apples, southward, is not a new experiment; it is yet true that it has never become a settled practice. Still, there would seem to be no reason why a profitable trade might not thus be developed. What would be Winter Apples—grown here—mature in late Summer, or early Autumn, if cultivated at the South. Besides they are apt, from the rapidity with which they mature, like the pears of California, to be deficient in flavor. Facilities of inter-communication have so improved, recently, that the Apple can hardly be classed among the perishable fruits. Certainly it is durable enough to traverse the paths of the Banana and Orange.

The Taxes upon your property, for the year 1880, were paid, under Protest. When so much of both Real and Personal Estate is exempted, which not even the largest charity can admit to be employed for religious or scientific purposes; your *Finance Committee* could no longer submit in silence to what must only be regarded as an unjust discrimination. It will rest with your TRUSTEES to decide whether to continue payment, awaiting a more convenient time for the recovery at law of the sums paid; or, to summarily decline payment, leaving it with the Courts to determine if the Legislature or the Civic Assessors are the better judges if Horticulture is a "Science!" The General Statutes of the Commonwealth exempt from taxation

"The personal property of literary, benevolent, charitable, and scientific institutions incorporated within this Commonwealth, and the real estate belonging to such institutions, occupied by them or their officers for the purposes for which they were incorporated."

Under that provision, property amounting to Two Millions, Eight Thousand and Four Hundred Dollars ($2,008,400): contributes nothing to educate our children, to enforce our laws, to defend our lives,—to protect itself! Of all the Associations

* *V.-P.* Hadwen.

incorporated to "advance science," the WORCESTER COUNTY HORTICULTURAL SOCIETY only bears its share of the common burden. "Millions for defence, but not a cent for tribute!" was the cry of our fathers. Shall we tamely submit, longer, to such wanton injustice?

The Statutes,—which exempt from Taxation—"houses of religious worship,"—strive, in a feeble measure, to protect the tax-paying Issachar, by the saving clause that

"Portions of such houses appropriated for purposes other than religious worship, shall be taxed at the value thereof to the owners of the houses."

How many dollars, think you, will the City Treasury derive from that source? which, were the spirit of the law observed, should be so rich in returns? You may imagine that no "portions of such houses" are mis-"appropriated." Possibly, your innocence is justified. And yet it sounds somewhat strange, reading over the programme of a course of Lectures announced to be delivered in the "Chapel of the ——— Church," on the "Lyric Poets in their relation to Music." Goethe, and Burns; Scott, and Tennyson; Longfellow, and Moore; join hands on this new *Walpurgis Nacht;* but the Witches-Dance is transferred to the House of God! For the sum of One Dollar and fifty cents ($1.50), the chronic hunger after righteousness might be harmoniously appeased "during the season:" or, if you only craved the waters of life at a "single admission," thirty-five cents would be required, as you assuaged your thirst to the pious tune of

"Believe me, if all those endearing young charms."

Was there ever aught like it, since that avatar of the new dispensation when, after some extreme *pirouette* of Ellsler, Margaret hugged Ralph Waldo in her ecstasy, exclaiming:—This, indeed, is Poetry! the Sage replying, in calm self-poise, No, Margaret! it is Religion!

Impose "burdens grievous to be borne" upon Horticulture, for its deficiencies as a "Science," But "temper the wind to the shorn lambs" of a chapel wherein, for gain, Little's songs are accompanied

"To the Dorian mood of flutes and soft recorders!"

The taxation of other people to maintain a worship that we are

too penurious to support, out of our own pockets, comes nigher to making "bricks without straw" than any invention of late centuries. God must be hugely pleased with such vicarious generosity; and find Divine satisfaction in awarding an eternity of bliss to those who are so lavish of substance—*not their own!*

President Wilder has announced that, if health and life are spared to him, the Eighteenth (18th) Session of the American Pomological Society, A. D. 1881, will be convoked in Boston. In his Annual Report, A. D. 1879, your Secretary, anticipating such a contingency, "suggested for your seasonable consideration, whether it might not be courteous and eminently proper for this Society, to ask that one day be set apart for a visit to Worcester." Reflection, and consultation with many of your number, have satisfied me of the wisdom of that advice. True,—we can not show our visitors such princely estates as those of Messrs. Hayes and Hunnewell. But we have land and water scapes that God made, and man, to his credit! has not marred. Here is a Hall, all our own, wherein to receive them; and a Library, comprising the hoarded wisdom of ages,—yet valued more as the priceless means to an inestimable end. And—beyond and before aught else, a membership of men and women, enthusiastic and intelligent; encouraged by what they have already accomplished, yet regarding the sum of their achievements as but an incentive to further activity and research. Were it the bearing year,—so called,—it might be possible to prepare a worthy display of Apples. Town shows, the Weekly Exhibitions of our Society, with the miscellaneous agglomeration at the Rink,—each and all confirm a life-long faith that, in the growth of this chiefest of all fruits; palatable in Summer as the *Astrachan* or *Worcester Spy;* rivalling the Peach, in Autumn, as the *Gravenstein;* or crowning the joys of Thanksgiving, and "Love's Young Dream," at Sewing-Bee and Sleigh-Ride, with the *Hubbardston Nonesuch* or *Mother;* Worcester County has no competitors to dread. And, supplementing the whole, we can proffer a hospitality for which Worcester was always credited: that has never failed, in the history of the town; and which needs but such an occasion to prove that the hearts and hands of the sons are as warm and open as those of the sires.

The acceptance of an invitation from us would impose responsibilities for which it might be well to prepare in advance, by the appointment of a competent Committee, and the delegation to it of adequate and suitable authority.

Had your Secretary reflected for a moment, upon the nature of the duty which he imposed upon himself; a duty required by no rule, and which deference to unbroken custom did not then exact; it is doubtful if this series of Annual Reports would have been commenced. Public favor has kindly welcomed them, and your direct partiality has stamped its seal of approval. Perhaps as a record of development from year to year; a review of the steady progress that has been made in "advancing the science and encouraging and improving the practice of Horticulture;" the labor spent in their preparation was not in vain. Nor—even as an incentive to continued and further effort toward the ultimate attainment of perfection;—that final goal of horticultural saints;—may they be esteemed wholly fruitless. Nevertheless,—their entire scope and tendency could not be thus restricted: and therefore it is that your Secretary feels that he would have shrunk in dismay from the task, had he anticipated into what dark and shadowy paths it would, all too frequently, constrain his reluctant steps. For it has not been his good fortune, always, to treat of new flowers or fruit; to describe some rare acquisition; or to comment upon those strange or eccentric forms whereby Nature consummates her processes and evolves new species, or genera. But, almost invariably at the close of the year, to call the roll of our lessening associates, following them into the deepening gloom, with only the melancholy satisfaction of embalming their memory and rehearsing their virtues. Writing a necrology is but a dreary task, however so much it may be a labor of love. These portraits upon our walls are inaudible voices from the grave. But who was there, if not your *Secretary* who knew them from his childhood, to speak to you of Green and Chase; of Champney and Draper; of Colton and Ripley; of Jaques and Paine; of Lincoln (Levi), Thomas; or either Earle! And now that the arrow of the insatiate archer has struck home, once more, shall the voice of

fraternal affection be hushed in this Hall, that witnesses our Annual Meeting for the first time since the death of DANIEL WALDO LINCOLN!

Justly eulogized as he was at the mortuary gatherings of Municipal, or Business Corporations, which had latterly almost monopolized his energetic devotion; and perhaps too exclusively claimed, at the recent Fair of the New England Agricultural Society; I should be false, alike to his memory and to myself, were I not to assert, in this presence, that, above all, he was a Horticulturist! From the time, almost a half-century ago, when, a mere lad, I was trusted to pass the buds with which he was perpetuating all choicer varieties of the Peach:—until, but a few weeks since, he was inquiring with deep interest about the *Azalea Mollis*, just then blooming for the first time in Elm Park. Throughout that entire period,—of Fifty years in duration,—his tastes inclined him, as undeviatingly as the needle points to the pole, to our favorite pursuit. Diverted from it, as he necessarily was, of later years, by engrossing occupations, he was never insensible to the attractions of those rarer flowers or fruits, whereof the enterprise or skill of man has, recently, been so prolific. An inherited responsibility was nobly upheld; and no citizen of Worcester, qualified to judge, could tell from the appearance of the homestead, that there had been a death or a succession. If an eye, more than ordinarily observant, could detect any change, it would have been in an obvious tendency to the consolidation of forms and varieties in harmony with synchronous fashion.

Mr. Lincoln's taste for Horticulture was innate. And his associations, from maturer youth, conduced to the development of his natural inclinations. Sitting at the feet of *Dr.* Oliver Fiske,—that Gamaliel of our local Floriculture and Pomology,—he early became familiar with the traditions of the fathers; and acquired the practical knowledge which that kindly old man was happy to impart to those for whom he took a fancy. Of *Dr.* Fiske it was, that *William Lincoln* thus wrote in his History of Worcester:

"From this period," (A. D. 1821), "an increasing defect in the sense of hearing, induced him to retire from busy life, and devote him-

self to the pursuits of horticulture and agriculture, those employments, in his own graceful language, 'the best substitute to our progenitors for their loss of Paradise, and the best solace to their posterity for the evils they entailed.' The results of that taste and skill in his favorite occupations, early imbibed, ardently cherished, and successfully cultivated, have been freely and frequently communicated to the public in many essays, useful and practical in matter, and singularly elegant in manner."

Of how many varieties of Apples, Peaches, and Pears, accumulated by the good *Doctor*, do we owe our knowledge to that little Nursery, formed with his own hands by Mr. Lincoln upon the ground now covered by the estates of Joseph Mason, Esq., and Ex-Gov. Bullock! The writer well recollects what pains he took to gather peach stones; requesting people to save them, and going in person to collect any considerable quantity of which he was advised. His stock, budded from sound trees of the red and luscious Rareripe, the early and late Melacoton; and widely disseminated from the perfect trust reposed in his integrity, did much to preserve these varieties—than which none have since been found superior,—in local cultivation. Were the same method adopted now;—would it be too much to hope for like or equal results? With pits from sound fruit, and buds from healthy stocks,—what should prevent the County of Worcester from enjoying the Peach, once more, in superabundance? Once in a generation, mayhap, occurs a frost to which the very trees will succumb. Such was the case A. D. 1860, but that extremity of cold was equally fatal to the Cherry and Quince. With health, no fruit-tree is hardier than the Peach: and with unhealthy trees Mr. Lincoln, knowingly, had nothing to do.

Few men have lived, in this community, more sternly guided by an inflexible sense of duty. Once convinced of the right thing to do, in an emergency, and he never shrank from doing it,—no matter at what personal inconvenience or loss. Twice in his life—all too short for the public good,—was this markedly the case. As Representative to the General Court, he voted to equip the Cushing Regiment for the Mexican War: knowing right well that, for so voting, he would forfeit the suffrages of his constituents and be denied the customary re-election. Twenty years later,—he maintained the indefeasible right of

the people to the uninterrupted use of Main Street, against corporate usurpation and a singular individual arrogance that had hitherto brooked no opposition to its selfish will. His sturdy independence cost him the Mayoralty:—possibly as great a loss to the city as to himself. For the services that were valueless to the public were eagerly sought by the great Railway Corporation, in whose active direction he continued through life. Most truly did the stone which the builders rejected become the head of the corner! The future historian of Worcester will award him that justice heretofore withheld; and, vindicating his memory from the charge of disloyalty, too effectually used to his prejudice by his cunning opponents, as a cloak to their own selfish purposes; record the fact that, all this time, he held the written thanks of John A. Andrew for his zealous co-operation; and that, so long as he was *Mayor* of Worcester, that great Patriot and Statesman reposed the chiefest faith and reliance upon him of all the Municipal Officers of Massachusetts.

More especially was Mr. Lincoln thorough in what he did, or undertook. He seemed fully possessed of the axiom;—if you are indifferent, send! if you would succeed, go? Whatsoever was to be done, he did himself, if possible; and what "his hand found to do he did it with his might." In Horticulture this enured to his benefit; as it will profit all who follow the example. For, in those early days, when Horticultural Societies were in their infancy, if formed at all; and the great European Nurseries had gained but narrow repute; it depended upon the man himself whether diligence and skill should merit and obtain appreciation. That Mr. Lincoln was thus successful, where many failed, needs not to be stated here. But unexpected testimony to that effect was borne from abroad, by Mr. Wood, of West Newton (so pleasantly known to you), who mentioned to your Secretary, during the late New England Fair, his coming to Worcester with his father, some forty-five years ago, to procure trees from a nursery that could be trusted. The location which he pointed out was that original one, about the intersection of Elm *Street* with Linden, and which has been heretofore indicated.

Of his devotion to this Society, what could be more eloquent

than our simple Records? In which from the commencement, until the doleful close by that festal river, there is scarcely a page whereon his name is not obvious as of one suggesting new themes and methods of improvement. Succeeding his *Uncle* William, he became a Trustee, A. D. 1841, and thenceforward, to the day of his death, was at your beck and call in whatsoever position you might elect to make use of him. As Chairman of Committees,—whether of Nomenclature; or as a judge of the rarer varieties of flower or fruit; as Vice-President, and subsequently President, until his voluntary retirement; and for the entire Forty years, either by election or *ex-officio* a Trustee; he was ever ready to render service where you placed him. As Chairman of a Special Committee, he reported, January 29th, A. D. 1862, in favor of the removal of the Library of the Society to this Hall; a recommendation which you wisely sanctioned. He was the first to advise the inception of that system of Weekly Meetings, for the discussion of Horticultural topics, which did so much to arouse our own Members: an example that, lately imitated by the Massachusetts Horticultural Society, has been equally vivifying to that venerable body. Apt of perception and prompt to act, his counsels were ever sagacious. Were other proof lacking,—this very Hall, which he was swift to suggest and in whose erection, as one of your Committee, he took such interest, would furnish ample evidence.

Of the direct services to the Horticulture of Worcester County, rendered by Mr. Lincoln, there is not space left for their recital. I have already spoken of his opportunities to obtain and preserve varieties collected by *Dr.* Fiske. When that Garden and Orchard was broken up, Mr. Lincoln was careful to get all that was worth having: thereby doubtless perpetuating much that must have been lost without such diligence and knowledge. He was not accustomed, in his latter years, to pride himself upon a somewhat virulent attack of the *Morus Multicaulis* fever. But as one who was permitted, by especial favor, to feed his silk-worms, your Secretary may be suffered to remark that the disease ran its course, the patient fully recovering; while worms, mulberry-trees, and prospective

profits, simultaneously vanished as a rapidly dissolving mirage. Petroleum, nor silver, could be more delusive.

Hearing of that gorgeous novelty from the Amazon—the *Victoria Regia*,—he visited Philadelphia and, obtaining a young plant, with some seeds also, was fortunate in developing it to its ultimate perfection. Of this enterprise, our learned associate remarked in the *Gardener's Monthly* for September ult., that "Mr. Lincoln was, we believe, the next after Mr. Caleb Cope to undertake the culture of the Victoria Lily in this country." Few, of this present audience, were privileged to see that Lily, as then exhibited. Though procured and cultivated at considerable pecuniary loss; and at much greater personal inconvenience; it was yet remunerative to him from the admiration which it aroused and from the new interest that it appeared to impart to Horticulture itself. In whatsoever would dignify that, he counted nothing amiss.

But, while never given to boasting, he yet did take a modest share of credit to himself for the introduction in this vicinity, of the Northumberland Fillbasket *Raspberry;* and of the Beurre d'Anjou, and Washington, *Pears.* Speedily winning favor, when first tested, they have not been surpassed as yet by any of their newer and pretentious rivals. Mr. Lincoln's thoroughness has been mentioned. Perhaps it may be as appropriate here, as elsewhere, to state that, finding errors apt to happen from the confusion of tongues, he constrained himself to the mastery of the French language; long after his collegiate instruction had become rusty; that he might be able to correspond in their vernacular with *MM.* André Leroy *et Fils.* Even then he could not escape imposition;—not necessarily designed on the part of his correspondents. For just what and how many of the varieties, wherewith our Gardens and Orchards have been enriched, we who survive have been indebted to him for their introduction, can never be known. But it is perhaps not too much to assert that, if it had not been for his intervention, our local landscape would have possessed fewer charms,—our Gardens and Orchards far less attractions. Since he esteemed at its true worth all that was tasteful and lovely. Not restricting himself to the growth of Fruit, however palatable: but seeking out and

collecting, for wider dissemination, the flora of remote regions, that others might share in his own enjoyment of natural beauty.

And so he died! under that First sun of July which, by a strange coincidence, had greeted the nativity of three* of his nearest kin; and shed its fatal rays upon the dying hours of yet another† than himself!

"The words of the Preacher, the son of David, king in Jerusalem:

What profit hath a man of all his labour, which he taketh under the sun?

I made me great works; I builded me houses; I planted me vineyards.

I made me gardens and orchards, and I planted trees in them of all kind of fruits.

Then I looked on all the works that my hands had wrought, and on the labour that I had laboured to do: and, behold, all was vanity and vexation of spirit. * * *

Wherefore I perceive that there is nothing better than that a man should rejoice in his own works; for that is his portion; for who shall bring him to see what shall be after him?"

All which is respectfully submitted, by

EDWARD WINSLOW LINCOLN,

Secretary.

Horticultural Hall,
Worcester, Mass., Nov. 3, A. D. 1880.

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* A daughter; a sister; a sister-in-law. † A sister-in-law.

OFFICERS AND COMMITTEES

OF THE

WORCESTER COUNTY HORTICULTURAL SOCIETY,

FOR THE YEAR 1880-81.

PRESIDENT:

STEPHEN SALISBURY, Jr., of Worcester.

VICE-PRESIDENTS:

STEPHEN SALISBURY, of Worcester; PHILIP L. MOEN, of Worcester.
O. B. HADWEN, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

CHARLES E. BROOKS, of Worcester.

TRUSTEES (BY ELECTION):

Isaac Davis,	Worcester	Alexander H. Bullock,	Worcester
George E. Francis,	"	Charles O. Thompson,	"
James F. Allen,	"	Sylvanus Sears,	"
Henry Woodward,	"	Henry Phelps,	"
William T. Merrifield,	"	Nathaniel Paine,	"
William T. Harlow,	"	Thomas A. Dawson,	"
H. M. Quimby,	"	J. Henry Hill,	"
Samuel A. Knox,	"	James Draper,	"
Francis H. Dewey,	"	Henry L. Parker,	"
Samuel Flagg,	"	William H. Earle,	"
Horatio Phelps,	"	William W. Cook,	"
Charles E. Parker,	"	Calvin L. Hartshorn,	"
Thomas M. Lamb,	"	Joseph Lovell,	"
Frank J. Kinney,	"	Paul Whitin,	Whitinsville
John C. Newton,	"	George Cruickshanks,	"
Emory Banister,	"	Newell Wood,	Millbury
John D. Lovell,	"	F. M. Marble,	Grafton
Augustus N. Currier,	"	Joseph C. Lovell,	West Boylston
George F. Hoar,	"		

STANDING COMMITTEES.

ON FINANCE:

Nathaniel Paine, Stephen Salisbury, Jr., Henry Phelps.

ON LIBRARY AND PUBLICATIONS:

Edward W. Lincoln, George E. Francis, Charles E. Brooks,
Mrs. T. L. Nelson.

ON NOMENCLATURE:

James F. Allen, Henry Phelps, George E. Francis, O. B. Hadwen.

ON ARRANGEMENTS AND EXHIBITIONS:

O. B. Hadwen, *Chairman*, James F. Allen, James Draper, George Cruickshanks, Henry Phelps, Newell Wood, Mrs. O. B. Hadwen, Mrs. T. L. Nelson, William H. Earle, William W. Cook, Charles E. Brooks, *President* Salisbury, and *Secretary* Lincoln.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1881.

The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

WORCESTER, MASS.:
EDWARD R. FISKE & SON, PRINTERS,
1881.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS

O. B. Hadwen, Chairman.
James F. Allen.
George Cruikschanks.

James Draper,
Mrs. O. B. Hadwen,
Newell Wood,
W. W. Cook,
Henry Phelps,
Mrs. Thos. L. Nelson,
William H. Earle,
Charles E. Brooks.

President—Stephen Salisbury, Jr.
Secretary—Edward W. Lincoln,
Nos. 5 Oak, and 18 Front, Streets.

COMMITTEES.

Flowers, &c.—Edward W. Lincoln, *Chairman;* Charles E. Parker, Hermann F. A. Lange.

Fruit—Henry Phelps, *Chairman;* Newell Wood, Henry L. Parker, William H. Earle, Charles E. Brooks.

Vegetables—Henry Phelps, Edward W. Lincoln, James F. Allen.

Nomenclature—James F. Allen, Geo. E. Francis, Henry Phelps, O. B. Hadwen.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premiums must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small Fruits* must be entered in quart boxes or baskets, but may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

E. Competitors are expected to conform strictly to the conditions under which articles are invited. Evasion or violation of them may be reported to the TRUSTEES for future disqualification of the offender.

RULES AND REGULATIONS.

1. Exhibitions will be held on every Thursday afternoon, commencing January 6th, and terminating October 27th, A. D. 1881. The hours of exhibition will be between 3 and 4.30 o'clock. Articles offered for premium must be in the Hall by 2.15 o'clock, P. M., of the days of exhibition. Between 2.15 and 3 o'clock the Hall will be in the exclusive charge of the Committees of Award, who will allow no one else to be present.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester.*

3. After the articles are arranged they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove* them until the Exhibition is closed, when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits or Vegetables, is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Committees to *exclude from exhibition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste. The Committee on Fruits, in making awards, will especially regard uniformity in size, symmetry of form, and beauty of color.

7. The Committees have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary, by giving seasonable notice thereof.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables, under different names, or exhibiting, as grown by himself, Flowers, Fruit, or Vegetables, grown by another, thereby violating the objects and rules of the Society, shall be debarred from competing for the Society's premiums until re-instated.

9. No Flowers, Plants, Fruits, or Vegetables, will be entitled to a premium unless they possess points of superiority; and the Committees are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them; nor shall any specimen or variety, for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

11. In all exhibitions of Cut Flowers, the use of foliage must be restricted to that of the varieties shown; and not more than three blooms, clusters, or spikes, shall be allowed in one bottle.

12. No member of any of the Committees for awarding premiums or gratuities shall, in any case, vote or decide respecting an award for

which such member may be a competitor, or therein have an interest; but in such case such member shall temporarily vacate his place upon the Committee, the vacancy for the time being to be supplied by the remaining members of the Committee.

13. All premiums that are not claimed within three months after the close of the official year, shall be forfeited to the Society.

14. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

15. "Downing's Fruits of America," revised edition, will guide the Committee on Fruits in its decisions upon matters at issue.

☞The *Chairmen* of Committees are authorized, by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

FLOWERS, PLANTS, FRUITS & VEGETABLES.

A. D. 1881.

Thursday, January 6, 1881.

APPLES.—

For the best ten Tompkins King, three premiums. . $1.50, 1, .50
For the best ten Mother, three premiums . . . . . 1.50, 1, .50
For the best ten Fameuse . . . . . 1.50, 1, .50
For the best ten McClellan . . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity . . .

PEARS.—

For the best ten Jones's Seedling, three premiums . . 1.50, 1, .50
For the best ten Winter Nelis, three premiums . . . 1.50, 1, .50
For the best ten Vicar of Winkfield, three premiums, 1.50, 1, .50
For the best ten of any other variety, gratuity . . .

FLORAL.—Gratuities may be awarded for Flowers, or Plants in bloom.

Thursday, January 13.

APPLES.—

For the best ten Bailey's Sweet, three premiums . . $1.50, 1, .50
For the best ten Hubbardston Nonesuch, three premiums . . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity . . .

PEARS.—

For the best ten Beurre Langelier, three premiums . 1.50, 1, .50
For the best ten Josephine de Malines, three premiums . . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity. . .

FLORAL.—Gratuities may be awarded for Flowers, or Plants in bloom.

Thursday, January 20.

APPLES.—

For the best ten Northern Spy, three premiums . . $1.50, 1, .50
For the best ten Cogswell, three premiums . . . . 1.50, 1, .50
For the best ten American Golden Russet . . . . 1.50, 1, .50
For the best ten of any other variety, gratuity . .

PEARS.—

For the best ten of any variety, gratuities . . . . .

FLORAL.—Gratuities may be awarded for Flowers, or Plants in bloom.

Thursday, January 21.

APPLES.—

For the best ten Baldwin, three premiums . . . . $1.50, 1, .50
For the best ten R. I. Greening, three premiums . 1.50, 1, .50
For the best ten Yellow Belleflower, three premiums, 1.50, 1, .50
For the best ten Leicester Sweet, three premiums . 1.50, 1, .50
For the best ten of any other variety, gratuity . .

PEARS.—

For the best ten of any variety, gratuities . . . .

FLORAL.—Gratuities may be awarded for Flowers, or Plants in bloom.

Thursday, February 3.

APPLES.

For the best ten Peck's Pleasant, three premiums . $1.50, 1, .50
For the best ten Ladies' Sweet, three premiums . 1.50, 1, .50
For the best ten of any other variety, gratuity . .

PEARS.—

For the best ten of any variety, gratuities . . . .

PRIMULA SINENSIS.—

For the best three plants in bloom, two premiums . . $2.00 1.00
For the best single plant in bloom, two premiums . . 1.00 .50

PARLOR BOUQUET—

For the best, three premiums 3.00 2.00 1.00

Thursday, February 10.

APPLES.—

For the best ten Sutton Beauty, three premiums . . $1.50, 1, .50
For the best ten Tallman Sweet, three premiums . . 1.50, 1, .50
For the best ten of any other variety, gratuity . .

PEARS.—

For the best ten of any variety, gratuities . . . .

CUT FLOWERS.—

For the best Stand, three premiums $3.00, 2.00, 1.00

Thursday, February 17.

APPLES.—

For the best ten Old Nonesuch, three premiums . . $1.50, 1, .50
For the best ten Washington Royal, three premiums, 1.50, 1, .50
For the best ten of any other variety, gratuity . .

PEARS.—

For the best ten of any variety, gratuities . . . . .

HYACINTHS.—

For the best six plants in bloom, premium, ... $3.00
For the 2d best six plants in bloom, premium, ... 2.00
For the 3d best six plants in bloom, premium, ... 1.00

Thursday, February 24.

APPLES.—

For the best ten Stockwell Winter Sweet, three premiums, ... $1.50, 1, .50
For the best ten Spitzenberg, three premiums . . 1.50, 1, .50
For the best ten of any other variety, gratuity . .

PEARS.—

For the best ten of any variety, gratuities . . . .

PLANTS IN BLOOM.—

1st three, premium, ... $3.00
2d three, premium, ... 2.00
3d three, premium, ... 1.00

1st single, premium, ... 1.50
2d single premium, ... 1.00
3d single premium, ...50

Thursday, March 3d.

APPLES.—

For the best ten Golden Russet, three premiums - $1.50, 1, .50
For the best ten of any other variety, gratuity - -

PEARS.—

For the best ten of any variety, gratuities - - - -

AZALEA INDICA.—

For the best three plants in bloom, premium - - - - 3.00
For the 2d best three plants in bloom, premium - - - 2.00
For the 3d best three plants in bloom, premium - - - 1.00
For the best single plant, in bloom, premium - - - - 2.00
For the 2d best single plant, in bloom, premium - - - 1.00

Thursday, March 10.

APPLES.—

For the best ten Westfield Seek-No-Further, three premiums - - - - - - - - - - - - - - - - $1.50, 1, .50
For the best ten of any other variety, gratuities -

PEARS.—

For the best ten of any variety, gratuities - - -

CYCLAMENS.—

For the 1st six, in bloom - - - - - - - - - - - - $3.00
For the 2d six, in bloom - - - - - - - - - - - - 2.00
For the 3d six, in bloom - - - - - - - - - - - - 1.00
For the 1st three, in bloom - - - - - - - - - - - 2.00
For the 2d three, in bloom - - - - - - - - - - - 1.00
For the 3d three, in bloom - - - - - - - - - - - .50
For the best one plant in bloom - - - - - - - - - 1.00

Thursday, March 17.

APPLES.—

For the best ten Roxbury Russet, three premiums, $1.50, 1, .50
For the best ten of any other variety, gratuities - -

PEARS.—

For the best ten of any variety, gratuities - - - -

RICHARDIA ÆTHIOPICA.

For the best plant in bloom, premium - - - - - - - - $3.00
For the 2d best plant in bloom, premium - - - - - - - 2.00
For the 3d best plant in bloom, premium - - - - - - - 1.00

Thursday, March 24.

APPLES.—

For the best ten of any variety, gratuities - - - -

PEARS.—

For the best ten of any variety, gratuities - - - -

CUT FLOWERS.—

For the best Stand, premium - - - - - - - - - $3.00
For the 2d best Stand, premium - - - - - - - - 2.00
For the 3d best Stand, premium - - - - - - - - 1.00

Thursday, March 31.

APPLES.—

For the best ten Red Russet, three premiums - - $1 50, 1, .50

PEARS.—

For the best ten of any variety, gratuities - - -

CUT FLOWERS.—

For the best Basket, premium - - - - - - - - - $3.00
For the 2d best Basket, premium - - - - - - - - 2.00
For the 3d best Basket, premium - - - - - - - - 1.00

Thursday, April 14.

RADISHES.—

For the best four bunches, two premiums - - - - $1, .50
For the best kept Vegetables of four varieties, gratuities - -

CARROTS.—

For the best ten Intermediate, two premiums - - - 1, .50

CABBAGES.—

For the best three, two premiums - - - - - - - - 1, .50

ROSES IN BLOOM.

For the best ten Pots, two premiums - - - - $3.00, 2.00

For the best single plant, two premiums - - - 2.00, 1.00

PANSIES.—

For the best fifty, shown flat, three premiums, $3.00, 2.00, 1.00

HARDY BULBS.—(OPEN CULTURE.)

For the best display of flowers from, three premiums, $3.00, 2.00, 1.00

Thursday, April 21.

RHUBARB.—

For the best ten stalks of, two premiums - - - - $1, .50

PARSNIPS.—

For the best ten, two premiums - - - - - - - - 1, .50

HORSE RADISH.—

For the best five roots, two premiums - - - 1.00, .50

GERANIUMS.—(IN POTS.)

For the best six, three premiums - - - - - - $3.00, 2.00, 1.00

For the best single plant, two premiums - - - 1.00, .50

Thursday, April 28.

For the best Vegetables, four varieties gratuities - - -

For the best Fruit of any variety, gratuities - - - -

PARLOR BOUQUETS.—

For the best, three premiums - - - - - - - $3.00, 2.00, 1.00

HAND BOUQUET.—
For the best pair, two premiums - - - - - 2.00, 1.00

Thursday, May 5.

CUCUMBERS.
For the best pair, two premiums - - - - - - - - 1, .50
LETTUCE.—
For the best four heads, two premiums - - - - - 1, .50
RUTA-BAGA.—
For the best peck, two premiums - - - - - - - - 1, .50

HYACINTHS.—(Open Culture)
For the best display, three premiums - - - - $3.00, 2.00, 1.00

Thursday, May 12.

ASPARAGUS.—
Best two bunches of twelve stocks each, three premiums - - - - - - - - - - - - - - - $1.50, 1, .50
DANDELIONS.—
For the best peck of (cultivated,) two premiums, 1, .50

TULIPS.—(Open Culture.)
For the best display, three premiums - - - - $3.00, 2.00, 1.00

Thursday, May 19.

RHUBARB.—
For the best ten stalks, gratuities - - - - - -

FLOWERS AND PLANTS.—
Gratuities may be awarded - - - - - - - - -

Thursday, May 26.

ASPARAGUS.—

Best two bunches of twelve stalks each, gratuities,

FLOWERS AND PLANTS.—

Gratuities may be awarded - - - - - -

Thursday, June 2.

RADISHES.—

For the best twelve, gratuities - - - - - - - -

CUT FLOWERS.—(FROM HARDY PLANTS AND SHRUBS.)

For the best display, open culture, three premiums, - - - - - - - - - - - - - - $3 00, 2.00, 1.00

RHODODENDRONS.—

For the best display, three premiums - - - - 3.00, 2.00, 1.00

AZALEA. —(GHENT.)

For the best display, three premiums - - - 3.00, 2.00, 1.00

AZALEA.—(MOLLIS.)

For the best display, three premiums - - - 3.00, 2.00, 1.00

TULIPS.—

For the best display, two premiums - - - - - 2.00, 1.00

Thursday, June 9.

Gratuities will be awarded for the best meritorious specimens of Fruit and Vegetables.

PÆONIA.—

For the best display, three premiums - - - - $3.00, 2.00, 1 00

IRIS.—

For the best display, three premiums - - - - 3.00, 2.00, 1.00

PANSIES. (No Duplicates.)—

For the best display, flat, three premiums - - - 3.00, 2.00, 1.00

Thursday June 16.

STRAWBERRIES.—

For the best quart of Strawberries, gratuities - - -

BEETS.—

For the best early Beets, ten specimens, two premiums, 1, .50

ROSES. [To be shown in the boxes of the Society.]—

For the best twelve blooms or clusters of distinct named varieties of H. P. Roses outdoor culture, three premiums - - - - - - - - $4.00, 3.00, 2.00

For the best six blooms or clusters of distinct named varieties of H. P. Roses, out-door cultured, three premiums - - - - - - - - - - - - - - 3.00, 2.00, 1.00

For the best Stand of Roses, three premiums, 3.00, 2.00, 1.00

For the best Basket or Dish, of Roses, two premiums, 2.00, 1.00

CUT FLOWERS.—

For the best Stand, three premiums - - - - 3.00, 2.00, 1.00

For the best Basket or Dish, two premiums - - 2.00, 1.00

For the best Vase, two premiums - - - - - 2.00, 1.00

AQUILEGIA.—

For the best, in variety, two premiums - - - 2.00, 1.00

Thursday, June 23.

STRAWBERRIES.—

For the best quart of Downer's Prolific, three premiums, $1.50, 1, .50

For the best quart of Durand's Pioneer, three premiums, - - - - - - - - - - - - - - - 1.50, 1, .50

For the best quart of Wilson, three premiums - - 1.50, 1, .50

For the best quart of Charles Downing, three premiums, - - - - - - - - - - - - - - - 1.50, 1, .50
For the best quart of Capt. Jack, three premiums, 1.50, 1, .50
For the best quart of Col. Cheney, three premiums, 1 50, 1, .50
For the best quart of Crescent Seedling, three premiums, - - - - - - - - - - - - - - 1.50, 1, .50
For the best quart of Cumberland Triumph, three premiums, - - - - - - - - - - - - - 1.50, 1, .50
For the best quart of Wilder, three premiums - - 1.50, 1, .50
For the best quart of Queen of the Prairies, three premiums, - - - - - - - - - - - - - - - 1.50, 1, .50
For the best quart of Sharpless, three premiums, - 1.50, 1, .50
For the best Fifty berries of one variety, flat, gratuities, - - - - - - - - - - - - - - -

PEAS.—

For the best peck, three premiums - - - - - - 1.50, 1, .50

CUT FLOWERS.—

For the best Stand, three premiums - - - - 3.00, 2.00, 1.00

Thursday, June 30.

STRAWBERRIES.—

For the best quart of Monarch of the West three premiums - - - - - - - - - - - - - - - 1.50, 1, .50
For the best quart of Jucunda, three premiums - - 1.50, 1, .50
For the best quart of Triomphe de Gand, three premiums - - - - - - - - - - - - - - - - - 1.50, 1, .50
For the best quart of Great American, three premiums, 1.50, 1, .50
For the best quart of Durand's Beauty, three premiums - - - - - - - - - - - - - - - - - 1.50, 1, .50
For the best quart of Glendale, three premiums - - 1.50, 1, .50
For the best quart of Lincoln, three premiums - - 1.50, 1, .50
For the best quart of any other variety, gratuities,
For the best fifty berries of one variety, flat, gratuities.

PEAS.—

For the best peck, gratuities - - - - - - - - -

HAND BOUQUET.—

For the best pair, three premiums - - - - - 3.00, 2.00, 1.00

CUT FLOWERS.—

For the best Stand, three premiums - - - - 3.00, 2.00, 1.00

For the best Vase, three premiums - - - - 3.00, 2.00, 1.00

Thursday July 7.

RASPBERRIES.—Red.—

For the best two quarts of Brandywine, three premiums - - - - - - - - - - - - - - $1.50, 1, .50

For the best two quarts of Herstine, three premiums, 1.50, 1, .50

BLACKCAPS.—

For the best two quarts of Doolittle, three premiums, 1.50, 1, .50

CURRANTS.—

For the best two quarts Red, three premiums - - 1.50, 1, .50

For the best two quarts White, three premiums - - 1.50, 1, .50

CHERRIES.—

For the best two quarts, any variety, three premiums, 1.50, 1, .50

STRAWBERRIES.—

For the best two quarts, any variety, gratuities - -

BEANS.—

For the best peck of Snap Beans, two premiums, 1, .50

PEAS.—

For the best peck, of any variety, gratuities - -

TOMATOES.—

For the best ten specimens, two premiums - - 1, .50

CUT FLOWERS.—

For the best Stand, three premiums - - - - - 3.00, 2.00, 1.00
For the best Basket, three premiums - - - - 3.00, 2.00, 1.00

CLEMATIS.—

For the best display, three premiums - - - - 3.00, 2.00, 1.00

Thursday, July 14.

CURRANTS.—

For the best two quarts of La Versaillaise, three premiums - - - - - - - - - - - - - - - $1.50, 1, .50
For the best two quarts of Red Dutch, three premiums - - - - - - - - - - - - - - - 1 50, 1, .50
For the best two quarts of White Grape, three premiums- - - - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of White Gondouin, three miums - - - - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of any other variety, gratuities - - - - - - - - - - - - - - - - - -

STRAWBERRIES.—

For the best quart of Strawberries, of any variety, gratuities - - - - - - - - - - - - - - -

RASPBERRIES.

For the best two quarts of Brinckle's Orange, three premiums - - - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of Northumberland, three premiums - - - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of Hudson River Antwerp, three premiums - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of Clarke, three premiums - 1.50, 1, .50
For the best two quarts of Franconia, three premiums - - - - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of Hornét, three premiums, 1.50, 1, .50

For the best two quarts of Knevett's Giant, three premiums - - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of Herstine, three premiums, 1.50, 1, .50
For the best two quarts of Cuthbert, three premiums, 1.50, 1, .50

BLACKCAPS.—

For the best two quarts of Mammoth Cluster, three premiums - - - - - - - - - - - - - - 1.50, 1, .50
For the best two quarts of Gregg, three premiums - 1.50, 1, .50

PEAS—

For the best peck, gratuities - - - - - - - - -

POTATOES.—

For the best peck, two premiums - - - - - - - - 1, .50

HOLLYHOCKS.—

For the best 12 distinct, three premiums - - - 3.00, 2.00, 1.00

GERANIUMS.—

For the best Stand, three premiums - - - - 3,00, 2.00, 1.00

CUT FLOWERS.—

For the best Stand, three premiums - - - - - 3.00, 2.00, 1.00

Thursday, July 21.

RASPBERRIES.—

For the best two quarts of any variety, gratuities - -

BLACKBERRIES.—

For the best two quarts of Snyder, three premiums, 1.50, 1, .50
For the best two quarts of Kittatinny, three premiums, 1.50, 1, .50
For the best two quarts of Wachusett, three premiums, 1.50, 1, .50
For the best two quarts of any other variety, gratuities,

VEGETABLES.—

For the best ten ears of Sweet Corn, two premiums - - 1, .50
For the best ten Tomatoes, two premiums - - - - - - 1, .50
For the best four Squashes, two premiums - - - - - - 1, .50
For the best four Cabbages, two premiums - - - - - - 1, .50

CUT FLOWERS.—

For the best twenty blooms, or clusters, three premiums - - - - - - - - - - - - - - 3.00, 2.00, 1 00
For the best Stand of distinct varieties, three premiums - - - - - - - - - - - - - - 3.00, 2.00, 1.00

Thursday, July 28.

PEARS.—

For the best ten specimens of Doyenne d' Eté, three premiums - - - - - - - - - - - - - - $1.50, 1, .50

TOMATOES.—

For the best ten specimens of any variety, three premiums - - - - - - - - - - - - - - - 1.50, 1, .50

FLOWERS. (Seedlings of 1881.)—

For the best Stand, three premiums - - - - - 3.00, 2.00, 1.00

BASKET.—

For the best, of cut flowers, three premiums - - 3.00, 2.00, 1,00

PETUNIAS.—

For the best Stand, three premiums - - - - - 3.00, 2.00, 1.00

Thursday, August 4.

APPLES.—

For the best ten specimens of any variety, gratuities,

PEARS.—

For the best ten specimens of Bloodgood, three premiums - - - - - - - - - - - - - - - - - 1.50, 1, .50

GLADIOLUS.—

For the best ten named varieties, one spike each, three premiums - - - - - - - - - - - 3.00, 2.00, 1.00

PARLOR BOUQUET.—

For the best, three premiums - - - - - - - 3.00, 2.00, 1.00

CUT FLOWERS. (Grown from seed.)—

For the best stand of distinct varieties, three premiums - - - - - - - - - - - - - - 3.00, 2.00, 1.00

For the best Stand, three premiums - - - 3.00, 2.00, 1.00

Thursday, August 11.

APPLES.

For the best specimens of any variety, gratuities,

PEARS.—

For the best ten specimens of Beurre Giffard, three premiums - - - - - - - - - - - - - - - - $1.50, 1, .50

For the best ten specimens of Brandywine, three premiums - - - - - - - - - - - - - - - 1.50, 1, .50

CORN.—

For the best ten ears Sweet, three premiums - - 1.50, 1, .50

PERENNIAL PHLOXES.—

For the best display, three premiums - - - - - 3.00, 2.00, 1.00

CUT FLOWERS.—

For the best twenty blooms or clusters of distinct varieties, two premiums - - - - - 2.00, 1.00

For the best Stand of distinct varieties, three premiums - - - - - - - - - - - - - 3.00, 2.00, 1.00

For the best Stand, three premiums - - - - 3.00, 2.00, 1.00

Thursday, August 18.

APPLES.—

For the best ten specimens of Early Harvest, three premiums - - - - - - - - - - - - - - $1.50, 1, .50

For the best ten specimens of Red Astrachan, three premiums - - - - - - - - - - - - - - 1.50, 1, .50

PEARS.—

For the best ten specimens of Beurré de l' Assomption, three premiums - - - - - - - - - - - - 1.50, 1, .50

For the best ten specimens of Dearborn's Seedling, three premiums - - - - - - - - - - - - 1.50. 1.00, .50

For the best ten specimens of Osband's Summer, three premiums - - - - - - - - - - - - 1.50, 1, .50

POTATOES.—

For the best peck, gratuities - - - - - - - -

GLADIOLUS.—

For the best twenty distinct varieties, one spike each, three premiums - - - - - - - $3.00, 2.00, 1.00

LILIES.—

For the best six varieties, two premiums - - 2.00, 1.00

PINKS —

For the best Stand, two premiums - - - - - - 2.00. 1.00

CUT FLOWERS.—

For the best Stand, three premiums - - - - 3.00, 2.00, 1.00

Thursday, August 25.

APPLES.—

For the best ten specimens of Early Sweet Bough, three premiums - - - - - - - - - - - - $1.50, 1, .50

For the best ten specimens of Duchess of Oldenburg, three premiums - - - - - - - - - - - 1.50, 1, .50

PEARS.—

For the best ten specimens of Clapp's Favorite, three premiums - - - - - - - - - - - - 1.50, 1, .50

For the best ten specimens of Tyson, three premiums, 1.50, 1, .50

For the best ten specimens of Souvenir du Congrès, three premiums - - - - - - - - - - - 1.50, 1, .50

PEACHES.—

For the best ten specimens of any variety, three premiums - - - - - - - - - - - - - - - 1 50, 1, .50

PLUMS.—

For the best ten specimens of Bradshaw, two premiums, 1.00, .50

For the best ten specimens Imperial Gage, two premiums, 1.00, .50

For four varieties, the best lot, three premiums - - 1.50, 1, .50

ASTERS.—

For the best Stand, three premiums - - - - - - 3.00, 2.00, 1.00

POMPON ASTERS.—

For the best stand, three in a bottle, three premiums, ... 3.00 2.00, 1.00

PHLOX DRUMMONDII.—

For the best stand, three premiums 3.00, 2.00, 1 00

CUT FLOWERS.—

For the best stand of, distinct varieties, three premiums 3.00, 2.00, 1.00

NATIVE FLOWERS.—

For the best stand, three premiums . . . . 2.00, 1.00, .50

DAHLIAS.—

For the best twelve distinct blooms, three premiums . . . . . 2.00, 1.00, .50

GLADIOLUS.—

For the best display, three premiums 4.00, 3.00, 2.00

Thursday, September 1.

APPLES.—

For the best ten specimens of Williams's Early Red, two premiums . . . . . $1.00 .50

PEARS.—

For the best ten specimens of Clapp's Favorite, two premiums 1.50, 1.00

For the best ten specimens of Rostiezer, two premiums . . . . . 1.00, .50

For the best ten specimens of any other variety, gratuities . . . . . 1.00, .50

PEACHES—

For the best ten specimens of Cooledge, two premiums . . . . . 1.00, .50

PLUMS.—

For the best ten specimens of Green Gage, two premiums . . . . . 1.00, .50

For the best ten specimens of Jefferson, two premiums . . . . . 1.00, .50

For the best ten specimens of Lombard, two premiums . . . . . 1.00, .50

For the best ten specimens of Washington, two premiums 1.00, 50

For the best ten specimens of General Hand, two premiums . . . . . 1.00, .50

BEANS.—

For the best quart of large Lima, two premiums . $1.00, .50

GLADIOLUS.—

For the best stand, three premiums $3.00, 2.00, 1.00

VERBENAS.—

For the best stand, three premiums 3.00, 2.00, 1.00

CUT FLOWERS.—

For the best stand, three premiums 3.00, 2.00, 1.00

For the best stand of distinct varieties, three premiums 3.00, 2.00, 1.00

GERANIUMS.—(Distinct varieties.)

For the best twenty trusses, three premiums . . 3.00, 2.00, 1.00

Thursday, September 8.

APPLES.—

For the best ten specimens of Williams's Early Red, two premiums . . . . . $1.00, .50

For the best ten specimens of Early Sweet Bough, two premiums . . . . . 1.00, .50

For the best ten specimens of Worcester Spy, two premiums . . . . . 1.00, .50

For the best twenty-four specimens of Crab Apples, of one variety, three premiums . . 1.50, 1.00, .50

PLUMS.—

For the best of six varieties, ten specimens each, three premiums . . . . . $1.50, 1.00, .50

PEARS.—

For the best ten specimens of Belle Lucrative, three premiums . . . . . $1.50, 1.00, .50

For the best ten specimens of Bartlett, three premiums . . . . . 1.50, 1.00, .50

For the best ten specimens of St. Ghislain, three premiums . . . . . 1.50, 1.00, .50

For the best ten specimens of Earle's Bergamot, three premiums . . . . . 1.50, 1.00, .50

For the best ten specimens of Bonne du Puits d'Ansault, three premiums . . . . . 1.50, 1.00, .50

PEACHES.—

For the best ten specimens of Early Crawford, two premiums . . . . . $1.00, .50

For the best ten specimens of George Fourth two premiums . . . . . 1.00, .50

VEGETABLES.—

For the best four varieties of Vegetables, gratuities . . . . . .

MELONS.—

For the best three specimens of Green Flesh, two premiums . . . . . $1.50, .100

CUT FLOWERS.—

For the best stand, three premiums $3.00, 2.00, 1.00

PANSIES.—

For the best varieties (flat,) three premiums . $3.00, 2.00, 1.00

PERENNIAL PHLOX.—

For the best stand, three premiums $3.00, 2.00, 1.00

Thursday, September 15.

APPLES.—

For the best ten specimens of Foundling, two premiums . . . . . $1.00, .50

For the best ten specimens of Golden Sweet, two premiums . . . . . 1.00, .50

For the best ten specimens of Gravenstein, two premiums, ... 1.00, .50

CUT FLOWERS.—

For the best basket, three premiums $3.00, 2.00, 1.00
For the best stand, three premiums 3.00, 2.00, 1 00

DAHLIAS.—

For the best stand, three premiums $3.00, 2.00, 1 00

Thursday, September 22.

APPLES.—

For the best ten specimens of Pumpkin Sweet, two premiums $1.50, 1.00
For the best ten specimens of Porter, two premiums 1.50, 1.00
For the best ten specimens ot Dutch Codlin, two premiums 1.50, 1.00

PEARS.—

For the best ten specimens of Flemish Beauty, two premiums . . . . . $1.00, .50
For the best ten specimens of Paradis d'Automne, two premiums . . . . . 1.00, .50
For the best ten specimens of Washington, two premiums . . . . . 1.00, .05
For the best ten specimens of Doyenne Boussoc, two premiums . . . . . 1.00, .50
For the best ten specimens of Durandeau, two premiums . . . . . 1.00, .50
For the best ten specimens of Merriam, two premiums. . . . . 1 00, .50
For the best ten specimens of Seckel, two premiums . . . . . 1.00, .50

GRAPES.—

For the best three clusters of Moore's Early, two premiums . . . . . 1.00, .50

For the best three clusters of Lady, two premiums . . . . . 1.00, .50
For the best three clusters of Worden, two premiums . . . . . 1.00, .50
For the best three clusters of Prentiss, two premiums . . . . . 1.00, .50

PEACHES.—

For the best ten Early Crawford, two premiums . 1.00, .50
For the best ten Foster, two premiums . . . 1.00, .50
For the best ten Oldmixon, two premiums . . 1.00, .50
For the best new seedling, originated in Worcester County, three premiums . . . . . 1.50, 1.00, .50

PANSIES.—

For the best variety, flat, three premiums . . . 3.00, 2.00, 1.00

PARLOR BOUQUET.—

For the best, three premiums 3.00, 2.00, 1.00

PHLOX, Late.—

For the best display, three premiums 3.00, 2.00, 1.00

FLOWERS AND FRUIT.—

For the best combination, three premiums . . 3.00, 2.00, 1.00

Thursday, September 29.

APPLES.—

For the best ten specimens of Holden Pippin, three premiums . . . . . $1.50, 1.00, .50
For the best ten specimens of Lyscom, three premiums . . . . . 1.50, 1.00, .50
For the best ten specimens of Twenty Ounce, three premiums . . . . . 1.50, 1.00, .50

PEARS.—

For the best ten specimens of Beurré Hardy, two premiums . . . . . 1.00, .50

For the best ten specimens of Louise Bonne de Jersey, two premiums . . . . . 1.00, .50

For the best ten specimens of Seckel, two premiums, 1.00, .50

For the best ten specimens of St. Michel Archange, two premiums . . . . . 1.00, .50

For the best ten specimens of Washington, two premiums . . . . . 1.00, .50

GRAPES.—

For the best three clusters of Concord, two premiums, 1.00, .50

For the best three clusters of Agawam, two premiums, 1.00, .50

For the best three clusters of Delaware, two premiums, 1.00, .50

PEACHES.—

For the best ten specimens of any variety, gratuities.

VEGETABLES.—

For the best four varieties, gratuities . . . . .

For the best three Cauliflowers, two premiums . . 1.00, .50

CUT FLOWERS.—

For the best twenty blooms or clusters of distinct varieties, three premiums $3.00, 2.00, 1.00

For the best Stand, three premiums 3.00, 2.00, 1.00

ASTERS.—

For the best Stand, three premiums 3.00, 2.00, 1.00

Thursday, October 6.

APPLES.—

For the best ten specimens of Garden Royal, two premiums . . . . . $1.00, .50

For the best ten specimens of Maiden's Blush, three premiums . . . . . 1.50, 1.00, .50

For the best ten specimens of Washington Strawberry, two premiums . . . . . 1.00, .50

For the best ten specimens of any other variety, gratuities.

PEARS.—

For the best ten specimens, of Beurré Bosc, three premiums . . . . . $1.50, 1.00, .50

For the best ten specimens of Beurré Clairgeau, two premiums . . . . . 1.00, .50

For the best ten specimens of Sheldon, three premiums . . . . . 1.50, 1.00, .50

For the best ten specimens of Doyenne du Comice, three premiums . . . . . 1.50, 1.00, .50

For the best ten specimens of any other variety, gratuities.

GRAPES.

For the best three clusters of Salem, two premiums . . . 1.00, .50

For the best three clusters of Brighton, two premiums, 1.00, .50

For the best three clusters of Diana, two premiums . . 1.00, .50

VEGETABLES.—

For the best four varieties, two premiums 1.50, 1.00

CUT FLOWERS.—

For the best Basket, three premiums $3.00, 2.00, 1.00

For the best Stand, three premiums 3.00, 2.00, 1 00

Thursday, October 13

APPLES.—

For the best ten specimens of any variety, three premiums . . . . . $1.50, 1.00, .50

PEARS —

For the best ten specimens of Beurre Superfin, two premiums . . . . . 1.00, .50

For the best ten specimens of Dix, two premiums . . 1.00, .50
For the best ten specimens of Duchesse, two premiums, 1.00, .50
For the best ten specimens of Frederick Clapp, two premiums . . . . . 1.00, .50
For the best ten specimens of Marie Louise, two premiums . . . . . 1.00, .50
For the best ten specimens of Onondaga, two premiums, 1.00, .50

GRAPES.—

For the best three clusters of any variety, three premiums . . . . . $1.50, 1.00, .50

QUINCES.—

For the best ten specimens of any variety, three premiums 3.00, 2.00, 1.00

CUT FLOWERS.—

For the best Stand of single blooms or clusters, distinct varieties, three premiums 3.00, 2 00, 1.00
For the best Stand, three premiums 3.00, 2.00, 1.00

Thursday, October 20.

APPLES.—

For the best ten specimens of Mother, two premiums, $1.00, .50
For the best ten specimens of McClellan, two premiums, 1.00, .50
For the best ten specimens of Sutton Beauty, two premiums . . . . . 1.00, .50
For the best ten specimens of any other variety, two premiums . . . . . 1.00, .50

PEARS.—

For the best ten specimens of Beurré d'Anjou, three premiums . . . . . 1.50, 1.00, .50
For the best ten specimens of Beurré Diel, two premiums . . . . . 1.00, .50
For the best ten specimens of Goodale, two premiums, 1.00, .50

For the best ten specimens of Dr. Reeder, two premiums . . . . . 1.00, .50

For the best ten specimens of Urbaniste, two premiums, 1.00, .50

VEGETABLES.—

For the best four varieties, two premiums, 1.50, .50

CUT FLOWERS—

For the best Basket, or Dish, three premiums . . 3.00, 2.00, 1.00

For the best Stand, three premiums . . . 3.00, 2.00, 1.00

Thursday, October 27

APPLES.—

For the best ten specimens of any variety, three premiums . . . . . $1.50, 1.00, .50

PEARS.—

For the best ten specimens of Beurre Langelier, two premiums . . . . . 1.00, .50

For the best ten specimens of Winter Nelis, two premiums . . . . . 1.00, .50

For the best ten specimens of Glou Morceau, two premiums . . . . . 1.00, .50

For the best ten specimens of Lawrence, two premiums . . . . . 1.00, .50

For the best ten specimens of Mount Vernon, two premiums . . . . . 1.00, .50

For the best ten specimens of Dana's Hovey, two premiums . . . . . 1.00, .50

VEGETABLES.—

For the best five varieties, two premiums . . . $2.00, 1.00

For the best five roots of Celery, two premiums . 1.00, .50

CUT FLOWERS.—
POT PLANTS.—(In bloom.) } Gratuities may be awarded.
CHRYSANTHEMUM.—

TRANSACTIONS

OF THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY

FOR THE YEAR, 1881.

COMPRISING ESSAYS AND REMARKS,

AT STATED WEEKLY MEETINGS;

ALSO, THE

ANNUAL REPORTS OF THE LIBRARIAN,

AND OF THE

SECRETARY.

Worcester:
PRESS OF CHARLES HAMILTON,
311 MAIN STREET.
1881.

NOTE.

The Committee on Publication insert in this volume of "Transactions" all of the Essays which they were enabled to procure. It is to be regretted that even abstracts were impossible of attainment, in some instances, which would do justice to the themes as treated. Such was notably the case with the remarks of Secretary John E. Russell, on the Flora of Central America.

E. W. L.

HALL OF FLORA,

DECEMBER, A. D. 1881.

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WORCESTER COUNTY

HORTICULTURAL SOCIETY.

A. D. 1881.

Chemistry Something but not Everything in Agriculture.

By Professor Charles O. Thompson.

Before the Worcester County Horticultural Society, January 13, *A. D.* 1881.

[ABSTRACT.]

Chemistry has done great service in the world and has made more valuable contributions to the happiness of man than any other science. The improvements in scientific metallurgy alone give chemistry a very high place. When confining itself to the laws of dead matter, this science works accurately and usefully; but our knowledge of the processes of life is so limited and inexact that any attempt to guide any of the practical arts that depend upon the vital forces by the dicta of a physical science *alone* must be vain.

Whenever science comprehends the principles of any set of phenomena, a trustworthy prediction of results can be given in any case; as, for instance, the effect of carbon turning iron into a steel is so well known that the quality of the steel can be predicted from the percentage of carbon in it; a chemist can speak with certainty of many similar phenomena in the treatment of metals; but when he is asked to plant and fertilize corn so as to insure a crop he hesitates, because unknown and unmanageable conditions enter into the problem.

Farmers have put too much reliance on chemical fertilizers, and have found out that chemistry alone is an uncertain guide in practical agriculture. In the reaction from this conclusion there

is danger that the advantage of chemistry in agriculture will be under-estimated.

Dr. Playfair's translation of Liebig's great and useful work—Chemistry in its Relations to Agriculture and Physiology—awakened many hopes that were destined to disappointment. In this country, the New York Tribune following the suggestions of Liebig's book gave too much countenance in its invaluable agricultural department to the notion that a farmer can tell by a chemical analysis of his soil just how to treat his crops.

At this time, seventy years since the era of Liebig's Chemistry, all opinions seem to agree that chemistry is a valuable auxiliary to agriculture, but cannot claim to be its leader. As one wise man called theology "sanctified common sense" so good agriculture is instructed common sense. But chemistry has done some service to agriculture and will yet do much more. The nature of fertilizers has been effectively investigated, and more recently that of feeding stuffs—the latter being the theme of a valuable book just published by Dr. Armsby of the Connecticut Agricultural Station at New Haven.

As to soil, the physical conditions are quite as important as the chemical, and, for this reason, the chemical analysis of soils taken by itself fails of being a sure guide to the proper treatment of soils. Take Peat as an illustration: at first, the fact that it consists largely of carbon was taken as proof of its value as a fertilizer. It was applied fresh from the pit, with disastrous results, and was of course abandoned as worthless. The reaction was as unreasonable as the first position; for a close study of the physical properties of this substance shows a vast capacity for storing water, and when it is freed from deleterious acids it is very useful on leachy soils as a reservoir for water. A proof of this may be seen on a sharp slope in the Free Institute grounds, where I have succeeded in producing a good durable turf on a bank of hard pan and gravel by laying down first two inches of dry peat, then two inches of compost, harrowing in the grass seed and rolling. It is specially noteworthy that there has been no wash from the foot of the slope. The grass close up to the limit of the fertilized slope seems not to receive the least encouragement from it.

Again, in the matter of nitrogen compounds Dr. Armsby has shown that the soil does absorb free nitrogen from the air and prepare it for plant food; *i. e.* the soil acts first physically by absorbing the nitrogen into its pores, and then chemically by putting this absorbed nitrogen in shape for the nutriment of the plant. This explains the importance of keeping all soils light and porous by frequent stirring.

The great danger in the use of chemical fertilizers lies in our forgetting that these are *stimulants* more than fertilizers, and the exclusive use of them will soon make an inevitable and natural limit. *Used with natural fertilizers*, which maintain the supply of humus and help keep the soil porous as well as contribute to its fertility, chemical fertilizers are very helpful.

But whatever may be said for or against the practical application of chemistry to agriculture, two great points can be made in its favor as a disciplinary study in the training of men who are to be farmers: 1st. It cultivates the faculties which the farmer needs more directly and efficiently than any other science; viz. close and accurate observation, sound classification, correct reasoning from observation and a devout recognition of the binding force of natural laws.

2d. Chemistry is the only science that has at the present moment any chance at all of solving the perplexing but fascinating problem of the connection between life and matter. How, where and when the atoms of dead matter slip from the control of the ordinary molecular forces and group themselves under the higher generalship of the vital forces, are questions which chemistry will one day solve. They are questions of the highest dignity and importance, and an observant gardener or farmer is likely to study them to the best advantage. He has this encouragement, that, so far as we now know, plants hold the secret that we should all be so glad to get.

Some Experience in the Culture of Hardy Roses.

By William H. Spooner, of Boston.

Read before the Worcester County Horticultural Society, January 27, *A. D.* 1881.

The remarks on the subject of the Rose and its culture, and the suggestions which I shall offer you, have been gleaned from experience derived from personal observation in planting, tending, nourishing and comparing, and the results of such labor and attention. There is probably no plant so popular or so universally admired as the Rose, nor one of easier culture, and in none have greater improvements been made in beauty and variety within the last fifteen or twenty years. We frequently hear it said that the climate and soil of England are better adapted to the Rose than our own ; undoubtedly her humid atmosphere and less scorching suns are an advantage in favor of the production of exhibition flowers.

But when we look at France with her lighter soil and brighter sun, and see the immense product of her Rose farms, particularly in the south, where such quantities are grown for commerce in the famous Lubin district, what may we not expect for our own country, even with its bright sun and dryer atmosphere? Under these conditions, humidity must be obtained by artificial means, and our most accomplished cultivators are rapidly mastering the art. If our warmer sun is a disadvantage, still it makes the season longer, and we saw as fine, or perhaps finer, displays of roses last season in August, as in June ; I think the time is not far distant when a rose show of some kind can be made every month in the year.

It is generally supposed that to attain even a moderate measure of success in the Rose garden, all advantages of soil, scientific appliances, etc., are essential, but the amateur will find very satisfactory results, even when these conditions are not carried to great perfection.

The soil of my garden is not particularly adapted for the growth of Roses, being a light loam with a gravelly sub-soil, yet from this apparently uncongenial source, we succeed in growing a great many very good roses. I am not an advocate of the

deeply trenched or sub-soiling system in the preparation of the ground, considering it entirely unnecessary. One of the most successful Rose growers in the vicinity of Boston has improved a poor sandy soil, and adapted it for this purpose by spreading a liberal dressing of a kind of marl or clay found in most sand banks in layers, and by allowing the action of the frost upon it, it was then readily worked and proved just the requisite addition.

My system of planting was very simple at the outset, the land being already in a good state of cultivation. First, preparing myself with a well rotted compost heap of horse manure, the space assigned for the plants was covered with a portion of the compost, spread broadcast, and then thoroughly ploughed in. I may mention here that I have at other times made use of hen manure mixed with about one-third soil, and consider it a good fertilizer for the rose. The ground was then laid out in rows three feet apart, and the same distance observed between the plants, the holes for their reception were prepared by throwing out the soil to the depth of one spade from each, then throwing in two or three forks full of manure thoroughly incorporating it with the soil to the depth of the spade, and then all was ready for the plants.

My plants are all the so-called dwarfs, worked low upon the Manetti stock, which I prefer to the Prince's or Seedling Brier, as it seems better adapted to my light soil. I judge the latter variety may be better suited to a stronger or clayey soil; at any rate, all the plants I had worked upon this stock have died. My plants were imported and not received until about December 10th after the ground was closed, so that I was obliged to keep them in snug winter quarters, bedding them carefully into a frame, protecting them very closely with leaves, and covering the frame with boards. They came out in splendid condition in the Spring, and were planted with hardly an exception to successful growth; which result has led me to prefer the Spring for planting in our uncertain climate, and I have continued to make small experiments of the same kind yearly since my first venture. Having cut back the plant to two or three buds, the stock should be planted with the collar, which is the intersection of the bud with the stock, about two inches under the surfaee, and the soil pressed very firmly about it; the latter point I consider of the first importance, in fact it is one of the principal keys to success in Rose culture in Spring planting. Through the Summer I apply guano occasionally to the surface in the proportion of a handful or two to each plant, sometimes in a dry state, sometimes in water; and near the flowering season, especially in June when they are in a vigorous state of growth and bloom. Sulphate of Ammonia has

been recommended. I do not feel fully certain of benefit from the application of the latter, having tried it but one year. I use frequently in Summer, a top dressing of Brewers' spent hops strewn broadcast, not digging it in; it helps to keep down weeds and has many advantages. The Rose in a healthful growing state is a great absorber of water, and the free use of the hose, morning and evening, has been my most reliable assistant in promoting their excellence, and in freeing the plants from insects. Every fluttering leaf of the plants seems to rejoice, as the cool water showers down upon them, and the clean fresh foliage greatly enhances the beauty of the blossoms which it surrounds. But insects are ready to invade every domain of horticulture, and are especially destructive to the perfection of the Queen of Flowers; some of them may be overcome by water, but where the quantity essential for this purpose is not easily accessible, a dilution of powdered Hellebore, in proportion of a spoonful to two gallons of water, applied with a syringe, (it can also be applied dry by using a sulphur bellows, when the dew is on the leaf), will often be found useful, particularly for the extermination of the slug, a troublesome and damaging insect. But as regards the Rose bug or Rose beetle, I am in despair! The only remedy for this persistent plague that I have found has been the continuous application of the thumb and forefinger, and that with some severity!

It may be urged by some that the budded Rose has entailed upon it the disadvantage of the sucker, and its endless care, but actual experience proves this to be very slight. It is presumed that a lover of the Rose is with his pets as often as possible, and these persistent thieves are easily detected and quickly destroyed. I cannot agree with those who claim that the maiden bloom is the best effort with the budded rose, as I am now growing plants on the Manetti stock which have been out eight years, and are producing as fine blooms as ever. The amateur wants results in the shortest time, and therefore must take the budded plant; if sunk deeply enough it soon becomes fixed on its own roots. Few of us can hope to rival the magnificent blooms of "Monsieur Paul Neron" or the size and beauty of "Horace Vernet" and "Charles Lefebvre," which have secured the prize cups at recent rose exhibitions, but I am sure that the Manetti stock will give us an approximation to these high standards.

My practice is to heap up the earth about the plant to the depth of six or eight inches in the Autumn, then if they are killed to the ground line, no serious harm is likely to occur to the plants; I then scatter manure about them freely to prevent the ground thawing in the Winter.

It is not my practice to prune my plants in the Autumn, except of such kinds as make an excessive growth; these I cut back in a measure to prevent their being beaten or broken by the wind; in the Spring the plants are pruned thoroughly, the moderate growers down to two or three eyes, and the crowded shoots taken out; the very robust-growing kinds should be left longer, about eight or nine inches in length, the smaller shoots to four or five inches. Endeavor to keep the plant in good shape in trimming, leaving all parts exposed as much as possible to the influence of the sun, and the judgment of the operator must be the guide in producing this effect. Moss roses require a similar treatment in pruning, as they are generally short jointed, moderate growers, and the eyes have a particularly dormant or almost dead appearance, and should be trimmed back to within two or three inches of the previous year's wood; vigorous kinds like Crested, Lancii, Baron de Wassenaer, can be left longer. It is often desirable to prolong the blooming season of the plants, which can be accomplished by trimming a portion ten days or a fortnight after the first pruning. This is particularly applicable to the Moss, which has a naturally brief season, unless it is prolonged by accelerating or retarding the blooms by this divided method of pruning. It might be well to mention as an exception the Persian Yellow, which should be pruned every other year, and blooms only on each intervening year, for although without trimming at all, we could get some blooms every year, the plant would become unhealthy and die; so that to overcome this, and preserve the Rose, we must on the intervening season, sacrifice its beauty to the knife. By having two plants with this system of pruning, we can secure one for blooming each year. All the prunings from the Rose and other sources in the Spring are gathered and burned and the ashes spread about the plants as a fertilizer.

There is evidently a great difference in the constitution of hardy hybrid Roses, as has been proved by success or failure under the varying influences of climate, soil or stock, and as some results of my individual experience may prove suggestive, I append a list of a few which have been successful under my system of culture.

Duke of Edinburgh, one of the strongest and most hardy; color, brilliant scarlet crimson, very fine; Monsieur Paul Neron, vigorous and hardy, pale rose, immensely large: Pierre Notting, very hardy, good habit, strong grower, blackish crimson, beautiful form, but alas! how seldom do we find a fully developed and perfect flower! A bright sun apparently scorches the petals in the bud. As a notable exception to this fatal defect, we can

mention twelve most perfect flowers of this variety in size, form and color, exhibited by Mr. Gray at the rose show of the Massachusetts Horticultural Society one year ago, securing the prize cup; but this was the only time in five or six years that he had succeeded in obtaining perfect blooms.

Monsieur Boncenne, a plant of good habits, velvety crimson in color; very hardy and vigorous, the best of its class with me.

Victor Verdier, always good and reliable, brilliant rose.

Madame Boll, perfectly hardy and vigorous, free bloomer and early; flower not the most perfect in form or color, which is rosy peach.

Doctor Audry, hardy, vigorous and free bloomer, deep bright red.

Marie Beauman, one of the very best; moderately vigorous, quite hardy, with large and perfect flowers, very smooth, bright carmine.

Countess of Oxford, hardy, vigorous, fine large flowers, bright carmine red.

Lord Clyde, remarkably strong grower, hardy, a very good rose, crimson and purple shaded.

Elisa Boelle, moderately vigorous, hardy; with a very delicate white bloom, shading to flesh color.

Madame Rivers, a fine rose, moderately vigorous and hardy; clear flesh color, good form.

Miss Hassard, vigorous, hardy, delicate peach color; sweet and a free bloomer.

Emily Laxton, vigorous, of a climbing tendency, hardy and very desirable.

Charles Lefebvre, a very strong and hardy rose, flower large and beautifully formed, rich velvety crimson.

Alfred Colomb, this superb rose is quite hardy and vigorous, its brilliant crimson flowers are unrivalled in color, and in form a very effective globular.

Sir Garnet Wolseley, a thick bushy plant, rather short jointed, moderately vigorous and hardy; its large vermillion flowers and profuse bloom are very attractive.

Jules Margottin, of vigorous habit, very hardy and still one of the best; flowers bright cherry color.

Thomas Mills, very hardy, well formed plant of great vigor of growth, very prolific bloomer, flowers very large, color bright rosy crimson, one of the best with me.

John Hopper, an old favorite, hardy and very fine bloomer, rosy crimson and lilac rose color.

Madame Vidot, moderately vigorous, hardy, flower beautiful and perfect in form, palest flesh shaded rose color.

Madame Gabriel Luizet, vigorous, hardy, free bloomer and delicate satin rose color, and I think may prove one of the best. Sent out in 1878.

Abel Carrier, moderately vigorous, hardy, beautiful dark velvety crimson flower.

Coquette de Blanche, is a white rose, and a truly perpetual bloomer until late in the Autumn ; a remarkably vigorous grower and has proved hardy with me until last Winter, when it was killed to the ground.

Madame Georges Schwartz, vigorous and hardy, glossy rose.

Mabel Morrison, good grower, sport from Baronesse de Rothschild, pure white, not very double.

Dupuy Jamin, vigorous grower, color very fine carmine crimson.

Madame Scipion Cochet, very vigorous in growth, color bright cherry red.

Senateur Vaisse, hardy, good grower, flowers large and full, color brilliant red.

Princess Louise Victoria, vigorous, of a climbing tendency, flowers rosy salmon pink.

Bessie Johnson, vigorous, of rather spreading growth, color blush white.

Triomphe de Caen, a strong grower, flowers brilliant scarlet.

Madame Victor Verdier, growth vigorous, large flower, bright rosy crimson.

Beauty of Waltham, vigorous grower, flowers finely formed, cupped, color cherry crimson.

Fisher Holmes, of strong, spreading growth, flowers very large and double, color reddish scarlet.

Jean Gonjon, vigorous grower, flowers large, beautiful clear red.

Souvenir de Chs. Montault, good grower, free flowering, fragrant, color purple and crimson.

I will now name a few varieties that have not proved hardy or have been weak in growth, and less satisfactory in general results in my experience:

Madame Baronesse de Rothschild is usually winter-killed nearly to the ground, and never a vigorous grower. We cannot however, accord too high praise to the color of this rose, and with some growers it has proved successful, though always late in starting.

Madame Lacharme, rather tender with me, doomed especially to the damaging attacks of the rose bug, and seldom giving me a flower of any approach to perfection, though President Hayes of the Massachusetts Horticultural Society, at the Rose Exhibition

last year, was awarded a silver cup for a group of three roses, one of which was a most exquisite specimen of this variety, which I have never seen equalled in size or color, but this was an exceptional success.

Louis Van Houtte, almost always killed; I only saved it one year.

Cranston's Crimson Bedder, seems hardy enough, but a very poor grower.

Mdlle. Eugenie Verdier, weak grower, although a beautiful rose.

LaFrance, almost invariably killed.

Mdlle. Bonnaire, very beautiful, free in flower, but a poor grower.

Prince Camille de Rohan, not very hardy. I know this is not the general experience, but I have lost all my plants. It is dark maroon crimson in color.

Mdlle. Marie Rady, Viscount Vigier, Andre Dunand, Captain Christy, have proved tender.

We have now what bid fair to lead into a fine class of Perpetual climbing Roses for which we are indebted to the English growers; such kinds as Climbing Jules Margotin, Climbing Chs. Lefebvre, Climbing Victor Verdier and Madame Victor Verdier are destined to prove acquisitions.

We anticipate from the group of new Roses sent out in 1880 some desirable varieties, judging from the colored representations which we have seen.

They are:—Jules Chretien (by Schwartz), fine dark color.

Madame Oswald de Kerchove (Schwartz), of medium size, white, shading to coppery yellow.

Masterpiece (by Paul), seedling from Beauty of Waltham.

Pride of Waltham (by Paul), delicate flesh color in the way of Countess of Oxford.

Lady Sheffield (by Postons), type of Marie Beauman.

Red Gauntlet (by Postons), bright scarlet crimson.

Princess Marie Dolgorouky (by Gonod), deep rich satin rose, seedling from Anna de Diesbach and the new variety. Mrs. Jewitt (by Cranston) to be sent out next Spring, "brilliant glowing crimson, shaded with lake, flowers very large and globular, very fragrant, of robust habit."

Mary Pochin (by Rev. Mr. Pochin), to be sent out next Autumn. Among roses of recent introduction which promise well, and are likely to prove desirable are: "Charles Darwin," brownish crimson; "Marquis of Salisbury," rose shaded crimson; "Harrison Bien," velvety crimson and scarlet; "Duchess of Bedford," dazzling light scarlet crimson; "Countess of Rosebery,"

brilliant carmine rose; "Julius Finger," salmon pink; "Mrs. Laxton," bright rosy crimson; "Earl of Beaconsfield," light cherry carmine; "Madame Ducher," rose, shaded with purple; "Dr. Sewell," brilliant crimson scarlet, shaded purple.

In concluding this part of my subject I shall only allude briefly to the cultivation of Hybrids in pots, a branch of the business which is assuming large proportions with some of the commercial florists of the principal cities; New York and Boston will undoubtedly produce more than five hundred thousand blooms under glass this season, New York furnishing the larger proportion of the number, and Boston from eighty to one hundred thousand, and what is somewhat singular is the fact that fully nine-tenths of this large number are from the old variety, General Jacqueminot, which is not what under the modern system of culture would be considered a first class exhibition rose, as it is not very double; but is just what the florist wants, a rose remarkably prolific in flower, very fragrant, of very striking color at full bud or when half expanded.

THE MOSS ROSE.

Turning now to the fairest of the Rose family, we are reminded of the poetic allegory which accounts for its added beauty by supposing an angel to have found repose beneath its branches, and wishing to bestow some gift in recompense, but scarcely able to devise any addition to its charms:—

> "The Angel paused in silent thought:—
> What grace was there the flower had not?—
> Twas but a moment:—o'er the Rose
> A veil of Moss the Angel throws;
> And, robed in Nature's simplest weed,
> Could there a flower that Rose exceed?"

I must confess to a great love for this fascinating class, partly for the reason that my light, well enriched soil with its natural sub-soil drain of gravel tends to bring it to full perfection, and the delicate fragrance of the foliage is peculiar and unique. The ground should be prepared in the same way as for the hardy perpetuals with a larger application of manure, and I also apply a more liberal annual summer dressing during the blooming season. I have always found the Moss Rose more difficult to successfully transplant than any other, and it starts very slowly on its own roots.

Most of my Moss Roses are worked upon the Manetti stock, but the Common, I prefer on their own roots, the varieties Lancii and Celine do well in this way also.

The varieties that have proved best with me, are, Common or Old Moss, vigorous, free grower, color pale rose, fine double flower—the best of all.

Crested, next best, of vigorous growth, flowers very large and double, buds beautifully crested, color light rosy pink.

White Bath, a good grower, flower large and full, buds well massed, pure white.

Laneii, vigorous, upright grower and moderately free bloomer, color deep rose, round handsome bud.

Baronne de Wassenaër, color deep rose, perhaps the strongest grower of all; wood very dark and spiny, blooming in large clusters of buds, not as mossy as some other kinds.

Gracilis or Prolific, resembling the common, but with a longer bud, color deep pink, fine.

Celine, hardy, moderately vigorous, spreading, foliage dark colored, leaves rather small, a profuse bloomer, bud rather soft, not very double, color purple and crimson, pretty in bud; it would probably force well.

Perpetual White, moderately vigorous, color pure white, buds small and short stemmed, in rigid clusters of four to six buds, foliage a light pale green, leaves crisped. Not very hardy.

Reine Blanche and Gloire de Moussenses have not proved hardy with me.

The so-called perpetual Mosses seem to me a myth as moss roses; they may be perpetual but they possess very little moss, and the only variety that I have been able to save is Madame Morean, which is a perpetual free bloomer. Many successful growers recommend Madame Edouard Ory and Salet as the best.

My ideal type of the Moss Rose is that the stem should be of graceful, pendulous growth, crowned by at least two or more blossom stems, with a cluster of buds on each; the buds should be moderately large, tapering somewhat to a point and well mossed; the common moss seems to possess most of these requisites, which has led me to place it at the head of the list; another high in favor and very beautiful is Laneii, making an upright, stiffer growth with strong erect stems and rigid bud stems, bud globular, well mossed, but lacking the graceful pendulosity of the former.

The Common and Gracilis are well suited for layering in beds when grown on their own roots, as their growth is quite spreading. If the shoots are layered in the ordinary manner, they make fine plants in two seasons; the process is easy; first stripping the leaves from a portion of the stem to be layered, making a cut on the upper side about one inch below a bud, and half through the shoot, and one and a-half or two inches in

length, then twisting it slightly so as to bring the tip end of the stem upright or nearly so, and the tongue made by the cut pointing downward, draw the soil away so as to allow the burying of the shoot about three inches, place the shoot in the ground pegging it down with a forked stick to hold securely, draw the soil well about it and press firmly. This tongue will soon callous over and roots will be emitted from it. The work of layering should be done from the middle of July to about September 1st. Sometimes it is done in the Spring, but with less surety of success. The varieties Lancii and Celine propagate themselves rapidly, the latter stealing away in every direction unless checked. The former is a good grower and soon makes a thick cluster of plants and would almost answer for a hedge, growing very much like a raspberry and producing offsets in a similar manner.

In conclusion I must not forget to recommend the old-fashioned Sweetbriar, so much prized for the delicious fragrance of its foliage; and its light rose colored flowers although very single are not objectionable; it is a rank vigorous grower and very hardy, will take care of itself although appreciating cultivation.

If I have devoted too much of my space to descriptions, it must be borne in mind that the individual experience of success or failure with different varieties, and their characters, is what the masses, who have not the time or inclination for such labor, must depend upon: and if in this paper, I have succeeded in suggesting any thoughts to simplify the culture of the Rose, or furnished encouragement to any lover of it, I shall feel that my object has been accomplished.

The Cultivation of Small Fruits.

By Frank J. Kinney.

Read before the Worcester County Horticultural Society, Feb. 10, *A. D.* 1881.

Mr. President, Ladies and Gentlemen :—The subject for our discussion to-day is assuming such immense proportions, that it demands, that we as a Society shall disseminate only facts in relation to it, so I shall endeavor to speak of only what I know from experience, using no figures except those taken from my own books, or those of reliable friends ; and will preface my remarks by saying that I have found no "Royal Road" to success, but like all other business, to make a success of it, one requires first, ability to learn ; second, a long apprenticeship ; third, a love of the business ; fourth, courage and strength to combat with odds constantly. There is no calling that requires a more varied and thorough education, none where one will be more tempted to take the wrong road or where the right road is so full of pitfalls. I shall confine myself to varieties that have real merit, as I have found them, for the day would prove too short to mention all the varieties that have been considered worthy of a name.

The first fruit that will come to our table will be the strawberry, and it is conceded to be the best and most profitable of all and one of the easiest to grow. The lists of varieties are constantly changing : the hundreds of twenty-five years ago have dwindled down to one, the Wilson's Albany ; originated by John Wilson, of Albany, N. Y. If Hovey's Seedling, the first good native—originated by C. M. Hovey, of Boston, forty-five years ago—caused a slight breeze in the horticultural world, Wilson's Albany produced a whirlwind that carried the production of the strawberry into more families and States than all that had been done before. Rev. E. P. Roe in his elegant and instructive volume "Success With Small Fruits"—that our enterprising committee on the library have placed on our tables, and that ought to be read by every member—on page 45 says, "In spite, however, of all that is said and written annually against the Wilson, it still maintains its supremacy as *the* market berry."

And on page 96 he says, "In the present unenlightened condition of the public, one of the oldest strawberries on the lists—Wilson's Seedling—is more largely planted than all other kinds together. It is so enormously productive, it succeeds so well throughout the entire country, and is such an early berry that with the addition of its fine carrying qualities it promises to be the great market berry, for the next generation also." I discarded it eight years ago, as it required as good cultivation and soil with me as Jucunda, the Prince of Strawberries, and yielded less than half the profit. Still the facts remain as Mr. Roe has stated them.

The Charles Downing, originated by J. S. Downer, Fairview, Ky., took the place of Wilson's Albany on my grounds. I had some of the first plants sold and paid one dollar each for them, and never have regretted it. The people here in Worcester thought they didn't, and wouldn't like them, the first year or two, but now they rank second in number of quarts sold, and will soon rank first, unless there is some better and more productive new berry. Blossoms perfect.

The Crescent Seedling, originated by Wm. Parmelee, of New Haven, Conn., in 1870, although a comparatively new berry, is gaining many friends. It was not disseminated so rapidly as would have been if perfect fairness had governed its introduction; it was sent out two years as a perfect plant, but it is only partially so and requires some such early berry as the Wilson or Duchess set in every eighth or tenth row. It has done better with me on my early land than either Wilson or Charles Downing and the people who buy Wilson's because they are cheap, will buy Crescents, and we who grow strawberries for the market for a living, must grow what there is the most money in. The Crescent will bear the largest crop on light poor land of any berry I am acquainted with.

Kinney's Eclipse, originated by F. J. Kinney, Worcester, Mass., in 1873, is early like the above and is also the *longest* cropper I am acquainted with, and excepting the Lennig's White, is the best strawberry I have ever seen, and it is well known to many present that I try them all; it is an expensive amusement, but one might do worse. I have grown as large crops of the Eclipse, as of any berry except Jucunda, one of its parents, which it resembles inasmuch as it is particular in its choice of location and surroundings, and which it excels only in flavor. Blossoms nearly, but not quite, perfect.

The Jucunda is the best strawberry for me to grow that I have ever tried for profit or comfort, on soil suited to it, and am not sure but it would be best for me now to give up all other vari-

eties, as our worthy Secretary advised me to years ago, but I have not the courage to do it. It requires a strong, moist and rich soil; the plants are small and tender while young, but get very strong and robust as they advance in life, and a well-kept bed is a joy to behold after the first two or three months. Blossoms perfect.

The Sharpless has seemed inclined to do the fair thing thus far. It originated with J. K. Sharpless, Catawissa, Pa.; is a very large and good flavored berry, irregular in form at first and deserved the nickname it received last season, "Shapeless," but like Triomphe de Gand which it resembles in flavor the later berries are well formed, and they hold their size much better than the Triomphe, and like it do remarkably well in the greenhouse. They stood the drouth of the past season well, and withal did better than I expected them to do. Blossoms perfect.

The Glendale found by W. B. Storrs, growing wild in Glendale Cemetery, Akron, Ohio, in 1871, is one of the late strawberries that seems to have the elements of success in its make-up. I have adopted it and the Sharpless, and set them on a scale large enough last season to either condemn or establish them in my estimation as market berries on my grounds. Blossoms perfect.

I have a dozen newer strawberries on trial this season that will many, if not all of them, "be allowed leave to withdraw," as thousands of their predecessors have. I consider it the duty of every landholder to introduce new phases into the routine of their every-day life, and there is nothing that I have ever found, unless it was in watching the slow feathering chicken to see how much of its dress would conform to the fashion of the standard of excellence, that interests every one of my family so much, as watching the growth of some new and untried fruit.

I set all strawberry plants eighteen inches apart in the rows and the rows four feet apart. Used to set two feet by four, but the white grubs have caused me to make this change. If I want to keep them in hills I allow two strong young plants to grow from each old one, and root them on each side of the old ones, and as near in rows as possible, keeping off all other runners. If I want to raise matted rows I layer all the early young plants lengthwise of the rows so I can cultivate between the rows as long as possible, stirring the surface soil only. I cultivate, and hoe, to kill weeds, and not plants and corn.

The plants will usually take all the land by the middle or last of September. I mean to have my land in good condition to grow corn, and be ready to set my plants just as early in the Spring as the land will do to work and the danger of its freezing

enough to start the roots is past. I spend more time in setting my plants than most people, set less to the acre, and hoe more, and later in the season. Mean to hoe my beds all over, very carefully, the last thing before the ground freezes up, and give them a top dressing of some good staying manure. There is nothing better than fine ground, steamed bone, and good wood ashes, ten or twenty bushels of each to the acre, and twice that will do no harm if evenly sowed. This makes nearly a perfect fertilizer for almost any fruit, but should be sown and worked into the land separately. If wood ashes are not available either muriate or sulphate of potash may be used, should be fine ground, and if the muriate, not put on to the leaves of the plant when wet, or be placed directly in contact with tender roots. The sulphate is more expensive, but in my opinion much better and is entirely safe. Three hundred to five hundred pounds to the acre will be sufficient in most cases, but if potatoes, or strawberries, or some other potash plant has been grown a long time on the land, it may require to be doubled.

No person ought to attempt the raising of small fruits, any more than he would the erection of a building, until he has learned the "trade;" and he will find it quite complicated. Then he ought to learn how best to sell it, as that will have more to do with his success, than the raising.

I see by the expression on the faces of some of my conscientious hearers, that I am not advocating *quality* as much as they would; but at present the voters buy most of the strawberries, and they are not—as a rule—as good judges of small fruits, as of beer and tobacco; besides, they are not going to eat them all themselves, as they smoke and chew the tobacco, and drink the beer.

There are a few ladies and gentlemen, who visit our rooms exhibition days to study the fruits and flowers that make our tables and Halls but a little *lower* than those protected by the "Golden Gates;" they buy understandingly, and are willing to pay for good fruit, fresh picked, and carefully handled; and rather it would'nt be "Deaconed if you please;" but the average voter, who buys strawberries, or other small fruit, with a cigar or quid of tobacco in his mouth; or the exquisite taste of foreign or home brewed liquor in his throat, cares only to have them look well on top and cost *him* but little.

The picture over-drawn? Not a bit of it! I have seen many a voter in this otherwise beautiful City, with one-half of an eight or ten cent cigar between his fingers, smoking hot from his last vile breath, banter minutes with a shopman, and finally carry off a box of strawberries, or some other berries, that you or I, Mr.

President, would not eat ourselves, and certainly not sell to scatter the seeds of disease amongst the innocent.

But to return to our strawberry plants. We shall be obliged to invest in some kind of insurance, or we may lose all that we have worked all Summer for, yet,—the crop of strawberries.

People are constantly speaking and writing about plants winter-killing; but it seldom happens here. I have yet to see the first case except some foreign variety, like Jucunda, or Triomphe de Gand; but our variable and almost treacherous Springs will kill many native varieties, unless protected.

The sun dashes out some morning early in March, and the innocent plants finding their roots liberated, rouse themselves up, and looking Heavenward, take one long breath and court the embraces of the coquettish southern breeze; their sap begins to circulate, and their rootlets to travel in the warm soil in pursuit of nourishment; but alas! the night cometh, and with it a cold northern blast, and our innocent plants are stricken down in their first attempt at flirtation! and we mourn their loss in vain, unless we learn from it, that we must depend upon our own strength and knowledge for our own and our families' support.

The best way I know of to insure the crop, is to cover or mulch the whole ground evenly, and well, to the depth of two inches at least, with coarse light hay, or leaves, or some other material that will shade the ground, and not mat down too hard. I plough a light furrow around the outside of the bed, turning it on to the mulch to hold it, and then scatter bean poles, brush, or bundles of corn-fodder over the ground at intervals to hold the rest of the mulch; all the mulch is removed from all of my beds, every Spring, when danger of freezing is over; so I can take the plants from the paths on our matted beds, to set, and sell; as also to give us a chance to hoe the ground over, and put on more fertilizers. The best spring fertilizer I use, is composted American guano, droppings of poultry composted with decomposed turf or peat.

I mulch again before the heat of Summer commences, as a summer insurance and if I use a material worth more to plough under, than to save, plough it under with the plants as soon as the strawberries are off, salting the land well beforehand.

We used to run our beds two or three years and get more profit from the C. Downings, Kinney's 10, Boyden's 30, Kentucky, and Jucundas the second and third years, than the first, until the strawberry flea made his appearance; since then we have been obliged to make the change in management; and this summer and late fall ploughing, salting, and cultivating the cabbage on the strawberry beds, tends to keep the white grub in subjection;

and he is one of our most desperate and persistent enemies ; and other worms and bugs that breed in the ground.

To assist in bracing up some of the weak and faltering small fruit growers I have copied from my books the following figures. One sixteenth of an acre of Jucundas—in hills—in 1880 yielded five hundred quarts of berries, that sold for twenty-six and six tenths cents a quart, or one hundred and thirty-three dollars, for the berries on one-sixteenth of an acre of land, or at the rate of eight thousand quarts, or two hundred and fifty-three bushels per acre, or two thousand one hundred and twenty-eight dollars per acre, at above rates, and not a very good year for strawberries either.

From one acre of Charles Downing, Crescent and Sharpless I sold three thousand two hundred and forty-four quarts, or one hundred and one bushels at seventeen cents a quart and a fraction more, or five hundred and fifty-six dollars and sixty-one cents from the acre ; these were in the matted rows, and grew corn amongst them in 1879, the year the plants were set out.

The corn paid all the expense the first season—the varieties grown were Early Minnesota, and Early Worcester sweet corn—and the plants sold and used that came from the paths in the spring of 1880 paid the expenses for that year.

From one thirty-second part of an acre in Sharpless, in matted rows, I sold one hundred and four quarts—besides all that were ate on the bed, given away, and used to exhibit—for twenty-three cents a quart, and a fraction more, or at the rate of three thousand three hundred and twenty-eight quarts per acre—or one hundred and four bushels—worth seven hundred and sixty-five dollars and forty-four cents. This was a trial bed, containing two long rows, running over level, moist, loamy land, and dry shaley hill land, and many of the berries were left on the vines too long, and rotted, which damaged others on the vines; so I shall expect them to be fairly productive on any reasonable soil. So much for the strawberry beds we kept an account with. Now my doubting friends, the only reason I don't get rich growing strawberries, is, I don't have acres enough under cultivation.

Next in season is the Raspberry, and first ripe is the Brandywine, red, and Davidson's Thornless, black; both good hardy varieties, and fairly productive; and when properly cultivated on good moist—not wet—soil, well manured with strong manure, and the suckers of the Brandywine treated as weeds, are a desirable and profitable market crop; as the canes are thornless, can be cultivated in the small garden comfortably. Neither of them has proved tender with me, and I never have covered them in the Winter, and have grown them several years.

My best Red Raspberries until I had the Cuthbert, were the Hudson River Antwerp, and Northumberland Fillbasket. What money and credit I have received from the cultivation of this noble raspberry, I owe largely to the advice, precept, and example of our worthy Secretary, who has grown immense crops of it, on his small garden plot. And I have grown the Northumberland at the rate of 250 bushels to the acre, and sold them by the bushel, at 45 cents a quart, or $14.40 a bushel, or at the rate of $3600 per acre; and it was seasons when strawberries averaged but 20 cents a quart; but alas! just as we had got the trade of growing them well learned, and a good plantation established, there came an insect of some kind—and though we have studied and watched faithfully for two years, we know him only by his works, now—that lays from ten to twelve eggs in the young canes, in the space of an inch in length of the canes, and from twelve to twenty-four inches from the ground; the canes show no disease; continuing to grow thrifty till Fall, but many of them break where they were stung, when we come to lay them down, and many more when we come to take them up in the Spring; and the destruction of the despoiler has been complete, and the last season's work has gone to the bugs. I have felt compelled to lay by on my former laurels, for the present, and watch and pray; not forgetting to work all the time to try and ferret out the enemy. I have a few samples of canes on exhibition to-day.

I have in previous years raised crops of even Brinkle's Orange—the cream of the raspberries—that satisfied me; and remove the cane destroyer, and give the canes of the above three a protection of earth in the Fall—see E. P. Roe's "Success with Small Fruits," for cuts, &c.—and the person who would not be satisfied with the crop of fruit would be a hopeless sinner.

The Cuthbert seems to be too tough for this raspberry satan, as yet, and I hope it may so continue, for it is a raspberry good enough to satisfy the most fastidious amateur, and hardy enough to stand the rough treatment of the most careless farmer, and satisfy his ambition for quantity with its bountiful crops of fruit.

The new Black Cap, the Gray, pleased me more than any other of my new small fruit friends last season; being like the Cuthbert, very large, extremely productive, and good enough for anybody.

To produce the best results, raspberries should be set three feet by five, heavily manured and mulched in Summer, and the canes tied to wires when fruiting.

Close on the heels of the Raspberry comes the Currant, claiming its share of our time and praise; and like it, it requires plenty of room in a good moist well drained soil, made very rich. The best table currants are the Dutch, red and white, white Gondouin and White Grape; and the best market currants are the Cherry and Victoria. I am glad to stand with E. P. Roe on this currant question; he says on page 223 of "Success with Small Fruits:" "The horticultural doctors disagree so decidedly, that the rest of us can, without presumption, think for ourselves," &c. I have always contended there was no Versaillaise, but all were Cherry.

As for profit, I have made as much from raspberries and currants as from strawberries, but the crops are not so sure.

Who would be without the Blackberry? There were no fruits, or thorns, struck me more forcibly than those of the Snyder blackberry last year. They had the power to raise the blood to the boiling point, and make it boil over, literally I never have raised anything but chickens, that drew such crowds, either rain or shine, as did the Snyders. And I never ate anything but a first-rate custard pie, when very hungry, that was any better than a thoroughly ripened Wachusett blackberry, taken from the bushes in the cool of the early morning, and laid away in my stomach in just ten seconds. Really I need only these two blackberries to fill my bill; they are hardy, productive and good. Still I presume I shall try all the new varieties that are advertised, and raise a few hundred seedlings, to keep my spirits up.

Blackberries need to be set four feet by eight, and if the plantation is wide, every other space should be ten or twelve feet, so one can drive through with a cart or wagon. I trim or pinch but little on my soil, treat like weeds all plants that I do not want, tie bearing canes to wires same as raspberries, and mulch heavy enough to keep down weeds. I find them gross feeders, like all the other small fruits we have glanced at. My blackberries yielded at the rate of ninety bushels to the acre, and brought 15 cents a quart, or $4.80 a bushel, or at the rate of $432 per acre; about one-half profit. Part of the plantation had been set but one year. One small lot yielded at the rate of 150 bushels to the acre; they were about one-half Snyder and one-half Wachusett, and had been set three years.

Every family that has much land ought to have a Cranberry-bed. There are three American varieties—the Bell shaped; the Cherry, large and small; and the Bugle, oval or egg shaped, large and small. Although the Cranberry is a native of moist or wet land, it can be grown profitably on dry soil, by making a

bed composed of peat composted with manure and sand; care should be used so as to avoid getting in grass and weed seed, or roots. Such a bed ought to yield one to two bushels to every twenty square feet of land. It is a crop that will always pay when properly grown. There is no small fruit that keeps so long or is better liked.

There is many a bog meadow in Worcester County that is worse than worthless inasmuch as it is the birthplace of miasma, that might with a small outlay be converted into the most profitable land in the neighborhood. And yet, Mr. President, we, the exponents of Horticulture in the County, do not even offer a *Gratuity* to encourage its cultivation.

Grapes are good in their way and would feel slighted if we skipped them altogether, but if I only wanted to talk about them as the respected Commissioner of Agriculture of the United States of America does in his circular dated November 25, 1880, "How could we make the most and best wine out of them?" I should pray that my tongue might be paralyzed. I have a large family of children and say with A. M. Purdy, editor of the *Small Fruit Recorder*,—and I thank him here, and now, for the firm stand he has always taken in this matter—that I rather follow any of them to the grave, than have them sit at a table where wine was part of the repast, or any other fermented liquor, even apple juice. I thank God I can hear of no wine having been made from grapes in this good old County of Worcester this year, and hope I never shall; or in the State either!

But I do hear that many of the worthless tracts of hill land are being set to grapes; and that all who are using good judgment in selecting locations, varieties, and fertilizers, are well pleased with their success. There are thousands of acres in Massachusetts that do not produce enough to pay the taxes on them now, that a small capital of money and labor would make the most profitable land on the farm, if invested in this grape industry. There is a constant and growing demand for good ripe home-grown Concord grapes.

It needs about four hundred and fifty vines to the acre, for side-hill land, making them eight feet by twelve—and they would cost about thirty dollars; posts, and wire, and labor, and some compost to put in the hills to start the vines would cost forty dollars more; and there ought to be enough of some other crop raised on the land the first two or three years, before they were old enough to bear much, to pay for the labor of cultivation, and bone and other fertilizers that the vines need, and several crops of grapes.

The greatest trouble in grape growing comes from over manuring, and too much moisture. The grape is different from the other small fruits we have talked about, in this respect. There is very little danger of *its* suffering from drouth, if the roots and foliage are not destroyed too much, in the growing season.

I have better luck where I mow my weeds often and let them lay on my strong soil, than where I cultivate, to kill them.

I have corresponded with most of the vineyardists in this part of the State; and the average yield per acre is one and three-fourths tons this season, and the average wholesale price is seven and one-half cents per pound, or two hundred and sixty-two dollars and fifty cents per acre, and this has been an exceptionally poor year—so they all say—the rose bugs having done more damage than usual. The chances are that they will average more than this for the next twenty years, and when a vineyard is once established, if not allowed to overwork itself while an infant, it will last as long as a family.

There is no fruit, small or large, more surely remunerative, if grapes are grown strictly for food. The natural, or otherwise, enemies of the grape are as easily managed as those of other fruits. I think sometimes that robber birds, pestiferous insects and dare-devil weeds are friends in disguise; they compel us to be vigilant.

There are several grapes that are desirable to have in all collections, old and new, and some new ones that we hope will pay as vineyard grapes. Capt. John B. Moore, of Concord, Mass., has given us one, "Moore's Early," that he has great hopes of, and the Worden, another Concord seedling, is very desirable; and the Delaware, who would try and get along without it? or the Agawam, or Salem, or Massasoit, or Lindley? the last two being better than all the others of Rogers Seedling, and though the Worcester County Horticultural Society have left you out in the cold, my old and tried friends, I will take you in every time I find you good and ripe; and I shall grow the Merrimac, and the Wilder, for I like grapes in February and March as well as in September and October, and the old Diana, the good old winter grape that will keep till May if we let it alone.

The Brighton ought to be a good vineyard grape, it has done so well for the amateur. Still later we have the Lady and Prentiss, two new native white grapes that are spoken well of by those acquainted with them.

I would like to introduce many more new friends to you, would time and your patience permit, but will close by offering a plea

for the weeds, to offset against my friend's plea for the birds :—

I looked where the roses were blooming,
  They stood among grasses and seeds,
I said, "Where such beauties are growing,
  Why suffer the paltry weeds ?"

Weeping, the poor things faltered,
  "We have neither beauty or bloom,
We are grass in the rose's garden,
  But our Master gives us this room.

"The slaves of a generous Maker,
  Born from a world above,
We came to this place, in His wisdom,
  We stay to this hour, from His love.

"We have fed His humblest creatures,
  We have served Him truly and long;
He gave no grace to our features,
  We have neither odor nor song—

"Yet He who made the roses,
  Placed us in the self-same sod,
He knows our reason for being,
  We are grass in the garden of God."

House Plants for Winter.

By William W. Cook.

Read before the Worcester County Horticultural Society, Feb. 24, A. D. 1881.

Mr. President, and Ladies and Gentlemen :—The subject for our consideration to-day is "House Plants for Winter." And I understand that plants in conservatories connected with dwellings are included in the term used, as well as plants in the sitting-room or parlor. And the phase of the subject which I shall try to present in these remarks, is, "How to grow them."

And though I shall mostly speak in general terms, only alluding as it were incidentally to particular kinds or classes of plants, I shall endeavor through the whole, as far as I may be able, to answer the thousand-and-one questions, which are put to me every year, by ladies who have some kind of sick plant. Now a plant is not sick without cause. That cause may be too much water. It may be too little water. It may not have a congenial soil. It may have been kept in too high a temperature, or it may have been chilled. Now I cannot tell what ails a plant even when I see it, with a great degree of certainty, because I do not know what kind of care it has had.

But I know there are certain general principles of treatment necessary to be observed by every one who would grow plants successfully. A practical knowledge of these will not only aid one in keeping plants well, but it will also aid in detecting the cause, as well as in applying the cure for sickness. These general principles of treatment require that the plants must have a suitable soil to grow in, a proper temperature around them both day and night, and a sufficiency of moisture without any excess, applied to both roots and foliage. If these three things are faithfully attended to, it only remains to defend the plants from insects and they must flourish. To begin right in growing plants we must have a congenial soil for the roots. This should be light and rich, without any tendency to sourness. And it should not become baked and hard from the frequent watering necessary for plants in pots. On this account, the soil from the garden beds should never be used. When this is watered, it

is mud, and when it becomes dry, it is like a brick. It may be improved by the addition of old well-rotted manure and sand, but will never be good potting soil.

The best thing I know of, for a basis for a potting compost, is leaf mold from any kind of deciduous trees. Pine and other evergreens are to be avoided. This leaf mold may be from the leaves raked from the lawn, or any other convenient place; but it is necessary that they should be thoroughly decayed. When it becomes truly *mold* it is all right. Some varieties of leaves will hardly do this under two or three years.

Or, you may go into any deciduous woods, and after scraping away the leaves, take the layer of decayed vegetable matter under them. This, if obtained in the Spring, and overhauled a few times during the Summer, will be in good condition to use in the Fall.

Where leaf mold cannot be obtained, the next best thing is rotted sods. Take them two or three inches thick from an old pasture, or some light warm soil, never from soil that is heavy or clayey. They should be packed one upon another (in June is the best time) and towards Fall they should be thoroughly chopped and mixed over with the spade, two or three times, till they become quite fine. Then add to this, one-fourth of its bulk of old hotbed, or other thoroughly rotted manure. It is better if several years old. Add to every bushel of this mixture one-half peck of rather coarse sharp sand. If you are fortunate enough to obtain the leaf mold, you may use less manure and more sand.

A compost prepared in this way will be excellent for all kinds of common house plants, such as Geraniums, Petunias, Primroses, Fuchsias, &c. For Ferns and Lycopodiums, leaf mold and sand without any manure is best. But a very good substitute may be made by taking one bushel of the potting compost just described and add one and a-half pecks of sand, and one peck of old dry peat. This makes a soil very well adapted to most of the ferns and mosses when grown in pots, and it makes a good soil for Wardian cases. And if made a little richer, it is an excellent soil for Callas.

Of course Gardeners, when they are potting off a batch of plants, will vary the proportion somewhat, putting in more or less of sand and manure, according to the needs of the variety they have in hand. But there will always be good results, so far as they depend on the soil, from using such a compost as I have described.

The plants being potted in a suitable compost, they must have a temperature suited to the conditions of growth. And for most

of the plants commonly found in houses, a medium temperature is the best. A common living-room which is kept at a heat of seventy degrees or more till ten or eleven o'clock every evening, has a great deal higher average temperature than a common greenhouse. My largest greenhouse has not averaged so high as sixty-five degrees for six hours in the day since last October, while the night temperature has averaged from fifty to fifty-two degrees. Those of you who have visited it, can judge whether the temperature is such as to produce healthy plants.

The reason why plants are injured by such a high temperature in the night, is, that the heat stimulates the plants to try to grow when they lack one of the most essential conditions of growth, and that is light; and they grow weak and spindling. If possible, the temperature should be at least ten or fifteen degrees lower while it is dark. This may be attained by drawing a curtain between the plants and the room. In a bay window this can be done very easily. Of course it is necessary to be careful that in cold nights the temperature does not get low enough to freeze the plants.

A bay window in a dining-room which is heated from adjoining rooms, and which is allowed to get as low as fifty-five degrees at night is nearly as good as a conservatory which has no overhead light.

There are very vague notions about the giving of fresh air to plants. And plants in sitting-rooms and parlors are often injured by this giving of fresh air as it is called. When the room is swept, the windows and perhaps the doors too, are thrown wide open to let out the dust, and because the fresh air is so good for plants they are left open till the tender ones are fairly chilled. And then people wonder why they have such poor luck with plants? But it is no wonder!

It should always be borne in mind that no sudden changes in the temperature should be made. Nature does it just right. And how beautiful it is! First, the slowly increasing light awakens the plants from their nightly slumber, gradually arousing more and more their dormant energies, till the heat of noonday; and then as gradually quieting down to their evening rest, till the sun goes down and the darkness comes on.

A conservatory should be so constructed that some means of ventilation is easily accessible; and it should be where the cold air of Winter will not blow directly upon the plants. The mercury in a shady place in a conservatory ought never to rise above 70 degrees during the cold weather. As long days come on, and growth becomes more vigorous, 75 or 80 degrees would be permissible, but at night it should always be kept 15 or 20 degrees cooler.

Another important thing is, to give air gradually. Do not wait till the plants are half baked with the heat and then open the ventilator with a rush, but open in season a little, and then if you find the temperature too high, open a little more It is surprising how little is needed, if it is begun in season. It is better to close up the ventilator early rather than late, and then, if you use the syringe at all on your plants, give the foliage a good drenching. It not only refreshes them at the time but it creates a moist atmosphere which is most beneficial.

But there are a few plants, such as Callas, Smilax, etc., which I find are very much injured by the sun shining on the foliage when it is wet, and where these are contained in a collection of plants the syringing must be deferred till the sun has left them for the day. Where plants are kept in the sitting room or parlor they must have such temperature as the people who occupy the rooms require, because their health is of more consequence than that of the plants. Some plants do much better than others in such situations, and people must select such varieties as they succeed best with and let the others go.

But you may have the soil and temperature all right and have miserable, sickly plants, because of errors in watering. A plant may be drowned to death, or it may be dried to death. And the fact of death is just as serious to the plant, or plant grower, whether from one cause or the other. But the drowning to death is much more astonishing to the owner than the drying. Plants that are being over-watered seem to thrive exceptionally well for a time and then suddenly wither and die, and if you take hold of the stalk it will be seen that the roots are gone.

In watering, then, as in temperature, the "golden mean" must be observed, avoiding extremes. If you ask how the "golden mean" is to be attained, I answer, dismiss from your minds at once all ideas of watering once a day, or once in two days, or at any stated time. The atmosphere is in a condition some days to draw the moisture from the earth in your lower pots much more rapidly than it will other days.

Plants in small pots will need water oftener than those in large pots; and plants in the full glare of the sun, especially if its rays fall on the pots, require much more water than plants that get no sun at all, or get it at a distance from the glass. It is also necessary to be much more cautious in watering plants that are kept in pots that are glazed or painted, or in vessels of wood. If the earth in either of these is watered till it becomes mud, the plants growing in it, unless of pretty good size and strong growers, will not absorb all the water until it becomes sour, and either the plant dies, or more

likely, so many of the lower roots decay that the plant becomes stunted and sickly. Being worse than dead, because it is an eyesore, and a disfigurement to the plant-stand, and yet it has so much life left that you hate to throw it away.

Moreover, we learn by experience, that some species of plants naturally require much more water than some others in the same situations. Plants with an abundance of broad thin leaves will require much more water than plants with small and thick leaves. All plants with thick and succulent leaves, like the Cactus family, and most varieties of Begonias, must be watered more sparingly, and when dormant should have very little. Shrubby plants, such as Azaleas, Camelias, etc., must be rather sparingly watered in the earlier part of the Winter till they get ready to bloom and not excessively watered at any time. Azaleas seem to get sick very easily, and my experience is that very few sick ones get well.

I am often asked the question, "How often do plants need water?" To this I make answer, that plants in small pots, standing in a sunny window close to the glass, especially if the sun shines on the pots, may require water twice a day. While plants in larger pots, not in the direct rays of the sun, may require it no oftener than once or twice a week. So then, the only rule about watering plants, is to feel such a loving interest in them, that they are examined carefully every day and water given when it is needed.

One of the most injudicious ways of watering is to give a little every day. For when you do that some of your plants may be starving and others drowning. For instance, if some of the plants were too wet, a little every day would keep them so; and if some of them were quite dry a little would only moisten the top of the soil while the larger part of the roots would be suffering from drouth.

The true way then is to give enough to thoroughly moisten all the soil in the pot, then wait till it gets pretty dry before you give it any more. This applies to plants in common flower-pots. For plants in glazed pots, or window boxes, another rule must be observed and that is, not give them enough to go to the bottom. Such plants require a great deal more care in watering than plants in common pots do, and unless good judgment is used there will be an excess of water at the bottom and the plants will become diseased.

Another point to be observed if plants are to be kept in the highest state of health and vigor is to apply water to the foliage as well as the roots. I have spoken of syringing the foliage when you close up the ventilator in the conservatory, but plants not in a conservatory need this refreshment just the same.

At least once a week take them to the bath-room or kitchen sink, or any other suitable place and syringe copiously on both the under and upper sides of the leaves. It is best to use a syringe because if the water is applied with some force, it has much effect to remove both dust and insects. If you have no garden syringe give the plants a good showering from the nose of a watering-pot, and an attendant, if possible, should hold the plants so that the under as well as the upper side of the leaves may get its share. If no other way is attainable moisten the foliage and stems thoroughly with a soft sponge or rag. I have said this should be done at least once a week, but three times would be better.

I find that two different motives actuate people in growing plants in the dwelling. One class desires merely to save as many as possible of the plants which have flowered in the garden in the Summer time. If they can keep their plants through the Winter, and have them in good condition to plant out by planting-time, they are satisfied. They save their plants and towards Spring they begin to have blossoms. The other class desires blossoms and would not care for the trouble of plants, only for the flowers. In order to have them, the plants must be in a healthy, thrifty condition. And of course it is useless to expect many blooms in the early part of Winter from plants taken out of the ground in the Fall.

If you are unable to accommodate plants of good size, take off cuttings in July and grow them so they will be ready to bloom early, and they will generally keep on after once beginning. But if you have room for good sized plants, it is better to keep them in pots all the time. When the weather becomes warm enough to put them out of doors, place them on a bench or table in some place where they will get the morning or evening sun for an hour or two, and where they will be somewhat sheltered from violent winds. Give them only water enough to keep them from withering, and let them rest. They will need no other care, except to prevent their ripening seeds, till about the first of August. At this time, they should be re-potted, into pots about two inches larger than those they are in. This will give an inch of fresh soil all around the old ball, which, for most plants is quite sufficient. If the pots already in use are as large as can be permitted, the old ball may be reduced by using a round-pointed stick, till it will admit an inch of soil around it. If there is straggling, long jointed wood which needs to be shortened in, now is the time to do it.

After re-potting, let the plants remain in the same place for two or three weeks, and then if it is convenient, remove to a

place where they will get the sun all day, and let them remain till it is time to take them into the house. And this ought never to be delayed till the nights become cold enough to give them a very severe chill.

I think if people would only try this method once, they would find that a few bushy, well grown plants, will give them more satisfaction than a houseful of stubby things taken out of the garden.

I am often asked about fertilizers for pot plants. If plants appear to languish from any cause, many people seem to imagine that the soil is not rich enough. It does not occur to them that there may have been errors of treatment which have caused the difficulty and, misled by the crafty term "*plant food*," they think by feeding them more they will be all right. And so they often put on enough to destroy their plants entirely. It is my candid opinion, that the so-called "*Plant food*" in one form or another, has killed a good sized Greenhouse full of plants here in Worcester, within a few years. The tendency is always to use too much.

If plants are potted in a suitable soil to begin with, and re-potted in a suitable soil as often as they may need it, most kinds require very little extra fertilization. When they become *pot bound* as gardeners term it, and it is not desirable to use pots of a larger size, some kind of liquid manure can be used to advantage. And it does not make much difference, whether you use some of the various kinds of plant food, or a little Peruvian guano, or the guano from your hen yard. Only you can go to Mr. Rice's and buy twice the bulk of guano for the money you pay for plant food, and about all the good there really is in plant food, I imagine, is from the guano that is in it. At any rate, I venture to say, that there is twice the value for plant use in a pound of guano, than there is in any kind of so called plant food. I suppose that most people are led into an extravagant use of some form of manure for plants, from the mistaken idea that plants receive the greater portion of their nourishment through the roots. And so they think to make the plants thrive, just as they would fatten a chicken, by stuffing. It is true, that vegetation generally derives most of its water from the ground through the roots. And by far the greater portion of all living plants is water. But this water is contained in a wonderful system of veins and cells, which compose the solid portions of the plant. By far the greater part of this is carbon. If the water is dried out, and the carbon burnt, there is a very small residue left. The most of this, probably, comes from the ground; while it is probable, that the carbon, or nearly all of it, is absorbed from the air through the leaves.

We must therefore dismiss the idea of feeding plants as we do animals, entirely from our minds. All we can do, is to supply the best possible conditions of heat and moisture, as well as pure air and clean foliage, and the plants themselves must do the rest.

Although I fear I have already wearied you, I wish to say a few words on another topic, and that is, Rare and New Plants.

Every winter, in every considerable city, somebody goes about with some wonderful new thing. They got it from Mr. Vick, or they were sent out by some other great florist, to sell for them some unheard of new bulb, or lily, or something else. And always they find purchasers, in plenty, whether it is for a "Double Oxalis" or for the wonderful "Tassa Masacca."

Now here are your florists whom you all know, always on the lookout for something new, for their customers. And here are all the great propagating and wholesale houses in the country sending out every Spring and Fall, their catalogues of new and rare things for us to buy. Now I receive towards a half-bushel of such catalogues; some from Germany, some from Holland, some from England and Scotland, besides what I receive from our own country. And Mr. Lange, or Mr. Thayer, or Mr. Keyes, or any other florist could probably say the same. Now I want to ask in all candor: Is it wise to expect that some tramp is going to sell you some really desirable new thing, that none of us ever heard of? Perhaps none of *you* ever bought the "*Double Oxalis?*" but there were a good many who did; and when their plants blossomed the flowers were not double.

The "Tassa Masacca" was got up in this way:

It was a dull season of the year, and two or three young clerks got their heads together to see what they could do. They took some *Pearl Barley* and colored it a fine pink color with an aniline dye. Then they got a lot of seed bags at the seed stores and some flaming pictures of some not very common thing from an old Horticultural magazine, or some seed catalogue, and as a Latin sounding name would be more like the names the seedsmen send out, they had the name "Tassa Masacca" printed on their seed bags. Of course, the plant being so rare, they could only afford a few seeds to a packet for such a low price. One of the young men engaged in it told me all about it. Says he, "mind you, we did not sell any of them. We got two or three newsboys of our acquaintance to do the selling for us and we gave them a good percentage on what they sold." "Did they sell many?" I asked. "Sell!" says he, "they went like hot cakes. Each boy had one of those pictures to show what the seeds were going to produce, and some of them made two or three dollars a day selling our pink Pearl Barley at twenty-five

cents a package." Says he, "I believe the women rather like to be humbugged!" I would not like to say that. But I must acknowledge that it requires considerable effort to feel a very deep sympathy for any one who will pay a high price for a new and rare flower to a newsboy or tramp.

I regret very much that I am not more skilful with the pen. I feel that I have failed to do justice to the subject, or to those who have done me the honor to come out and hear what I have to say. But my heart has been in the work, and I have spent such time as I could well spare. I have tried to give some of the results of many years experience in the cultivation of flowers. I truly love them, and from the time when as a boy I used to roam the fields to see how great a variety I could find, to the present hour, I have found them an unfailing source of attraction and pleasure. In the Summer they beautify our grounds and make home itself seem more home-like. And house plants in the Winter, if well grown, are a perpetual joy to both old and young. If I have been able to say anything which shall help other lovers of flowers to be more successful in cultivating them, I shall be well repaid for the time I have spent.

Not every professional gardener is a nice man, and not every woman who grows plants is a lady, but I am sure that where they are grown and cared for from a love of them their influence is both elevating and refining. And as we watch the unfolding of buds and blossoms on the plants which are the object of our daily loving care, it would seem that some thought of love and gratitude to Him who formed the heavens and the earth in beauty must spring up in the coldest heart.

Æsthetics of Earth Culture.

By Henry L. Parker, Esq.

Read before the Worcester County Horticultural Society, March 3, A. D. 1881.

The Arts may all be classed under two general heads—the mechanical and the liberal or fine. The mechanical arts are those which tend to create or improve the necessities, comforts and conveniences of man. The liberal or fine arts are those which tend to elevate or improve the moral and intellectual qualities with utility as a secondary object. They are addressed to the imagination and the feelings, and excite pleasurable emotions by creations of the beautiful.

From an early age gardening has been classed with Poetry, Painting, Sculpture, Engraving, Music and the Drama, and treated as a fine art.

History demonstrates the fact that Agriculture is one of the first agencies of civilization. The cultivation of the earth is always a step preliminary to the cultivation of the arts and sciences. Not one nomadic tribe ever yet became civilized until first having fixed its habitations, enacted laws securing to each individual the rights of property, and turned its attention to the raising of annual crops instead of wandering from place to place and gaining a precarious subsistence by hunting or upon its flocks and herds. In fact such a roving life seems antagonistic to civilization, as witness the Arab and Tartar tribes in whose social and moral status centuries have made no improvement. Not one idea of benefit to the world ever originated with them, but when these tribes become once attached to the soil and commence its cultivation they advance at once in the scale of civilized life.

Thus Greece and Italy were pioneers in the civilization of Europe. And why? Because they were the first to practice Agriculture. The savage tribes which inundated Europe from Western Asia became attracted by the fertile fields, genial climate and pure skies of that loveliest of all lands—Italy. Here their wanderings ceased. They substituted for their huts and tents more permanent dwellings, began the cultivation of the earth, and the result was an agriculture which in many respects has not been surpassed in modern times. Fruit and vegetables received their share of attention. Pliny speaks of

the great varieties of pears and the abundant corn crops at Rome. Cato left many hints of value to the farmer or horticulturist of to-day. Seneca raised asparagus such as our markets have never seen. Many implements of husbandry similar in principle and structure to those of which we boast so much, and which we claim to be of modern invention, were known to them. Such was their pride in these pursuits that their most distinguished families were named from the products of the earth, or from implements or animals intimately connected with its cultivation.

Thus the Fabii deriving their name from *faba*, a bean, were renowned for the cultivation of this esculent. The Pisones were named from *piso*, to bray or bruise (presumably corn as in a mortar). The Lactucini from the lettuce. The Porcii were originally swine-herds. The Ovinii were originally breeders of sheep—the Caprillii bred goats—the Taurini, bulls.

But while it is true that agriculture is always a preliminary of civilization, it is equally true that the progress of any nation in civilization and refinement is marked first by fruit production and secondly by floriculture and landscape gardening.

First comes the struggle for existence and the supply of the active wants and necessities of man, then the gratification of the luxurious cravings of the palate, and lastly the gratification of taste.

As soon as man had passed the ruder stages of existence, from the life of the hunter and shepherd to that of a proprietor in the soil, and had begun the observation of particular plants, their change and decay, their life and propagation, their special properties, so soon did they begin to assume for him a spiritual meaning; they were personified and became the symbols of moral and spiritual qualities. Thus from time immemorial the never-dying Cypress and the blue Asphodel (springing up with every recurring season from its bulb buried in the earth) have been the emblems of immortality. Among the early Egyptians the Lotus was the symbol of fertility. Among all nations, and the most ancient, peace and victory have been symbolized respectively by the Olive and the Palm, love and marriage by the Rose and Myrtle, modesty and purity by the Violet and the Lily.

The Christian era from its very beginning has been especially marked by this symbolization of plants and flowers. The death of our Saviour and all its surroundings is supposed to be set forth in the Passion-Flower, from whence it derives its name. As one writer expresses it: "The leaves represent the spear which pierced His side, the tendrils the cords which bound His hands

or the stripes with which He was scourged, the ten petals the ten Apostles who deserted Him, the pillar in the centre of the flower the cross, the stamina the hammers, the styles the nails, the inner circle about the central pillar the crown of thorns, the radius around it the nimbus of glory, the white in the flower is an emblem of purity, the blue a type of Heaven. It keeps open *three days and then dies— denoting the death, burial and resurrection of our Lord."

There have been several traditions as to what particular tree furnished the wood of which the cross was made. One tradition ascribed it to the Aspen, whose leaves have been since the crucifixion in constant agitation in remembrance of that dreadful event. Another ascribes it to the wood of several trees:

† "Nailed were His feet to Cedar, to Palm His hands,
Cypress His body bore, Title on Olive stands."

The scourges with which our Lord was beaten were made from the Weeping-Willow. The Purple Orchis, also called Gethsemane, is supposed to have grown at the foot of the cross and to have been stained with the blood which flowed from it.

Many flowers were named from the Virgin Mary—the Marigold, Lady's-fingers, Dame's Violet, Lady's Mantle, Lady's Slipper, Maiden Hair and many others. The Marigold is so named because in bloom on all festivals held in honor of the Virgin.

Many flowers were also dedicated to the Saints. Feather-grass was dedicated to St. Alban, the first martyr of England. The Daffodil to St. Perpetua, martyred during the reign of the Emperor Severus. The poet Herrick says :

" When a daffodel I see
Hanging down its head towards me
Guesse I may what I must be,
First I shall decline *my* head,
Secondly I shall be dead,
Lastly, safely buried."

The flower of St. Duntsan was Monkshood; of St. Augustine, Archbishop of Canterbury, the Rhododendron; of St. Bartholomew, the Sunflower; and so the list might be indefinitely extended.

But the development of gardening as a fine art can hardly be so well illustrated by the life of individual plants as by noting

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* A devotional spirit seems to have strained a point here. The varieties of the *passiflora* generally known to us, remain in bloom but a single day.

† Pes Cedrum est truncus Cupressus
Oliva supremum palmaque transversum
Christi sunt in cruce lignum.

its progress and distinctive character in those nations where it has been most successfully practiced.

Among the oldest gardens of which we have any record are those of the Egyptians. Our knowledge of them is derived for the most part from the paintings and sculptures of Thebes. Their arrangement would be hardly consonant with modern taste. They were usually in the form of a quadrangle, with a vineyard in the centre also in the form of a quadrangle. Around the outer quadrangle were rows of Sycamores and Date Palms planted alternately. Tanks of water were constructed at regular intervals, near which, and fed by the moisture therefrom, were tufts of papyrus. Although it is said that the ancient Egyptians were fond of flowers, and that wreaths and chaplets were common among them, there is a singular absence of plants and flowers in the representations of their gardens to be found in their ancient ruins. But there *is* evidence that the topiarian art or custom of pruning or trimming trees into fantastic shapes was not entirely unknown to them.

Some of the great nations of antiquity like Babylon and Assyria were renowned for their stupendous gardens. The hanging garden of Babylon was ranked among the seven wonders of the world. It was built by Nebuchadnezzar for the gratification of his Queen, that she might have something to remind her of the mountains of her native country. It was built in the form of a square, the base of which occupied four acres, and was composed of terraces which rose one above the other until the highest overtopped the walls of the city three hundred feet high. These terraces were built up with huge stones, provided with sloping paths which reached the summit, and planted with trees and shrubs so as to give it the appearance of a mountain. At the base of the garden flowed the river Euphrates, or rather a canal from that river, and an aqueduct was constructed so as to convey the water from this canal to the top of the highest terrace for purposes of irrigation. Large hollow piers were built and filled with mold to provide sufficient earth and moisture for the support of the largest trees.

At Nineveh gardens were laid out within the city walls, some of them being of considerable extent. In the British Museum are bas-reliefs representing apparently the gardens of the Assyrian Kings dating back to at least 1200 years before Christ. These show Vines, Palms and other trees, and a plant in full bloom. Upon one of them is a representation of an Assyrian bower composed of Vines, in which sits the king of Assyria and his Queen.

The garden of Semiramis is said to have been fourteen furlongs in compass.

Damascus was noted for its gardens which extended for more than thirty miles around. A writer of the fourteenth century states that the gardens about this place amounted to no less than 40,000.

At Jerusalem the wealthy citizens had their gardens without the city walls. None but rose gardens were allowed within the city walls on account of the unhealthy effects supposed to arise from the putrefaction of weeds and other offensive substances.

Among a people like the ancient Greeks whose strongest national characteristic was a love of the beautiful; a nation where oratory, philosophy, poetry, painting and sculpture received its highest development; we naturally look for a love of the ornamental in their horticulture, and for high attainments in the way of floral and landscape gardening. Yet although we know that the Greeks had great fondness for flowers, the rose, the lily and the violet being their especial favorites, and that wreaths of flowers graced all festive occasions—yet we fail to find any evidence that they were enthusiasts in floriculture or reached the highest standard in landscape gardening. We can find but meagre hints of these acquirements in this direction from their early literature. The only extended allusion to horticultural pursuits which we find in Homer is his beautiful description of the Garden of Alcinous:—

"Close to the gates a spacious garden lies,
From storms defended and inclement skies;
Four acres was the allotted space of ground
Fenced with a green enclosure all around.
Tall thriving trees confess'd the fruitful mould
The red'ning apple ripens here to gold.
Here the blue fig with luscious juice o'erflows,
With deeper red the pomegranate glows;
The branch here bends beneath the weighty pear,
And verdant olives flourish round the year.
The balmy spirit of the western gale
Eternal breathes on fruits untaught to fail;
Each dropping pear a following pear supplies,
On apples apples, figs on figs arise.
The same mild season gives the blooms to blow,
The buds to harden and the fruits to grow—
Here order'd vines in equal ranks appear
With all th' united labors of the year;
Some to unload the fertile branches run,
Some dry the black'ning clusters in the sun;
Others to tread the liquid harvest join,
The groaning presses foam with floods of wine.
Here are the vines in early flower descried,
Here grapes discolored on the sunny side,
And there in Autumn's richest purple dy'd.
Beds of all various herbs forever green,
In beauteous order terminate the scene."

Although this description is supposed to be wholly fabulous—a figment of the brain—it has no less value as an indication of the state of horticultural art in Greece when Homer sang his immortal Epic. In fact its value is rather enhanced by its fictitious character, for the poet may be supposed in such case to give loose rein to his imagination, and to depict in glowing terms the highest conception possible to a Grecian of what a garden might, could, or should be. And it is to be noted that in this description no flowers are mentioned. The garden is made to tickle the palate rather than to gratify the eye—it is a picture of sensuous rather than spiritual beauty. And no exact and definite description of a flower garden (so far as I am aware) can be found in their literature which can be cited as a type of their national taste. Plutarch says the Greeks planted roses and violets among the onions and the leeks. It is probable that in their floriculture they combined beauty with utility for the most part. Yet flowers were in constant demand in all their civil and religious ceremonies. Crowns and wreaths were worn by priests in their sacrificial rites. Actors, clowns and spectators at their games and theatres wore flowers in profusion—garlands were placed at the doors of temples and upon the altars of the gods. Pollox mentions the following as the principal flowers used by the Greeks in their crowns and garlands:—roses, violets, lilies, the water-mint, anemones (or the wind flowers), wild thyme, crocuses, hyacinths, the gold-colored aurelia, the hemerocallis (or flowers that bloom but for a day), the elenia, the thernalia (a plant the leaves of which are lit for the wicks of lamps), the asphodel, the white daffodil, the sweet lotus, the camomile, the parthenis, and such other flowers as are delightful to the eye and possess a sweet fragrance. So although the taste of the Greeks for landscape gardening was not developed in the direction of extensive ornamental grounds, yet much artistic effect was produced in the arrangement of fountains, shade-trees, evergreens and flowering shrubs. Among their evergreens the myrtle was a favorite. Sometimes it bloomed as a small shrub, in other places it rose to the height of a tree, while elsewhere it was planted in dense clusters or thickets and arched in bowers. Among their trees and shrubs were the tamarisk, the strawberry tree, the box, the bay, the juniper, the styrax, the white flowered laurel, the pine-tree, the smilax, the cedar, the carob, the maple, the ash, the elm, the plantane, and the evergreen oak. With the exception of the elder and the younger Pliny there is almost the same meagreness of allusion to horticultural pursuits in Roman as in Grecian literature. Even Virgil, their greatest poet, although he devotes the Georgics—next to the Æneid, his most famous poem, to agriculture, and topics intimate-

ly connected therewith, gives us no insight whatever into the condition of the horticultural arts. There is a passage in the fourth and last book of the Georgics which contains the intimation that gardening might become the subject of a future poem, but unfortunately for us, if such was the poet's purpose, he did not survive to execute his conception. The passage is as follows:—"And now, were I not just furling my sails with the close of my labors and hastening to turn my prow towards land, perhaps I might sing how rich gardens should be adorned—what treatment is needed for the rosaries of Paestum, where flowers come twice a year—how endive and green banks of parsley delight in drinking the rills; and how the cucumber winding through the grass swells in round juiciness. I might sing too and forget not of the snowflake and the flexile broom, and of the ivy with its creamy foliage; and of the myrtles that love the shore. Do not I remember that old Corycian who amid his vervain and white lilies found happiness of mind that was equal to the wealth of kings? Ah yes, the first was he to gather the rose of Spring and the fruit of Autumn. And even when sad Winter split the rocks with cold and bridled the current of the streams with ice—in that very season was he cropping the locks of the soft Acanthus. He had Lime trees (for the bees) and Stone Pines in great abundance, and as many fruits as the liberal tree had given promise of in early blossom so many did it retain in time of ripeness. But these I must leave on one side, restrained by the narrow bounds I have prescribed myself, leaving them to others to record." The first Roman garden, of which we have any account, was that of Tarquinius Superbus in the fifth century B. C. But at the beginning of Roman power every household, however humble, was supposed to own its small plot of ground, and in the laws of the twelve tables the words *hortus* and *heredium* or *garden* and *inheritance* were equivalent terms. As Rome increased in power and population, and the exigencies of city life rendered open air gardens impracticable, they resorted to pot and window gardening, and adorned stairways, steps and balconies, as well as windows, with pots and vases of vines and flowering plants. But the distinctive feature of Roman gardening was the Roman villa and the pleasure grounds connected therewith. The best description to be found of this, is the letter of Pliny the younger, describing his villa and garden at Tusculum. It is as follows:—"Before a portico in front of the house is a sort of terrace embellished with curious figures and bounded with a box hedge, from whence you descend by an easy slope adorned with the representation of divers animals in box answering alternately to each other into a lawn overspread with the soft—I had almost said the

liquid—acanthus; this is surrounded by a walk enclosed with tonsile evergreens, shaped into a variety of forms. Beyond it is the gestatio laid out in the form of a circus, ornamented in the middle with box cut in numberless figures, together with a plantation of shrubs prevented by the shears from shooting up too high; the whole is fenced in with a wall covered with box rising in different ranges to the top. On the outside of the wall lies a meadow that owes as many beauties to nature as all I have been describing within does to art; at the end of which are several other meadows and fields interspersed with thickets. The hippodrome is encompassed on every side by plane-trees covered with ivy, so that while their heads flourish with their own foliage their bodies enjoy a borrowed verdure; and thus the ivy, twining round the trunk and branches, spreads from tree to tree and connects them together. Between each plane-tree are planted box-trees, and behind these bay-trees which blend their shade with that of the planes. This plantation forming a straight boundary on both sides of the hippodrome, bends at the farther end into a semi-circle, which being set round and sheltered with cypress-trees, varies the prospect and casts a deeper gloom; while the inward circular walks (for there are several) enjoying an open exposure are perfumed with roses and correct by a very pleasing contrast the coolness of the shade with the warmth of the sun. Having passed through these several winding alleys, you enter a straight walk which breaks out into a variety of others divided by box hedges. In oue place you have a little meadow; in another the box is cut into a thousand different forms; sometimes into letters expressing the name of the master, sometimes that of the artificer; whilst here and there little obelisks rise intermixed alternately with fruit-trees; when on a sudden in the midst of this elegant regularity you are surprised with an imitation of the negligent beauties of rural nature, in the centre of which lies a spot surrounded with a knot of dwarf plane-trees—beyond there is a walk planted with the smooth and twining acanthus, where the trees are also cut into a variety of names and shapes."

Then follows a description of the architectural portion, the alcoves, fountains and summer houses constructed of marble. The gestatio which has been mentioned was a sort of avenue in which the Romans were accustomed to be carried to and fro in a litter by their servants. The hippodrome was an avenue for horse exercise. No villa was of course complete without a vineyard, orchard and kitchen garden.

I have transcribed this letter of Pliny at considerable length because it expresses better than in words of my own the two distinctive ideas which seemed to predominate in Roman landscape

gardening, viz.: the geometric system or set formal plan in which their grounds were laid out, and the topiarian art as it was called, or the custom of cutting and pruning shrubs and trees into all sorts of fantastic shapes. This custom was as universal as it was ugly and was copied from the Romans in the more modern Italian garden.

In the Italian garden, however, much more grandeur was affected than in the Roman. The Italian style delighted in balustrades, terraces, magnificent flights of stone steps, alcoves, niches, lofty clipped hedges and recesses for sculpture. It was an architectural affair.

French gardening was copied from the Italian style and conspicuous for its attempt at magnificence and architectural effort. Gardening in France received but little attention, or at any rate did not approach anything like perfection until the seventeenth century. Although pleasure grounds had before this been formed at Fontainbleau by Francis I. in imitation of those he had seen in Italy.

In the seventeenth century the beautiful grounds adjoining the Tuileries Palace were designed by Le Nôtre. From that date followed the design and laying out of the many beautiful gardens, parks, drives and promenades in which Paris and its environs abound. Sculpture, basins of water and fountains with a profusion of flowers are to be seen on every hand. The Champ d'Elysée with its trees, fountains and parterres of flowers was for a long time the pride of Paris. But with the laying out of the Bois de Boulogne, the boast of Napoleon that he would make that great metropolis the most beautiful city in the world gave promise of fulfilment.

Dutch gardening was in some respects an imitation of the Italian but without its magnificence. There was the same stiffness and whimsicality or perhaps an exaggeration of it, while they followed the same barbarous topiarian custom of pruning trees and shrubs. They also attempted ornamentation by water, intersecting their gardens with canals. But these canals being filled for the most part with stagnant water renders the effect anything but pleasing. But though little can be said for the taste of the Dutch in the arrangement of their gardens they excel in a knowledge of horticulture. They are especially devoted to the cultivation of all the bulbous plants. In the seventeenth century an insane rage took possession of them for the cultivation of the tulip—to such an extent was it carried that it was named tulipomania—fabulous sums were asked and received for single specimens of this gaudy flower and fortunes lost and won in speculations upon them.

I have thus briefly noticed, though not in chronological order, for that would be hardly possible, all those nations, ancient and modern, chiefly noted for the practice of the horticultural art; and the distinguishing features of their gardening; until we come to England from which nation we have most closely copied and where we find the nearest approach to perfection in taste.

I recognize the force of the maxim "de gustibus non disputandum," there must be no dispute about taste. And yet there are certain elementary principles upon which all good taste is founded about which there can be *no* dispute. One is that the best taste is always the nearest approach to nature. "The ranunculus glacialis," says Ruskin, "might perhaps by cultivation be blanched from its wan and corpse-like paleness to purer white and won to more blanched and lofty development of its ragged leaves. But the ideal of the plant is to be found only in the last, loose stones of the moraine; alone there, wet with the cold, unkindly drip of the glacier water, and trembling as the loose and steep dust to which it clings yields ever and anon, and shudders and crumbles away from about its root." And herein lies chiefly the superiority of the English landscape over the Italian and Dutch styles—the one is an imitation and the other a distortion of nature.

Another test of the purity of taste is its universality. "Hence," says the same authority, "false taste may be known by its fastidiousness, by its demands of pomp, splendor and unusual combination; by its enjoyment only of particular styles and modes of things, and by its pride also, for it is forever meddling, mending, accumulating and self-exulting; its eye is always upon itself, and it tests all things around it by the way they fit. But true taste is forever growing, learning, reading, worshipping, laying its hand upon its mouth because it is astonished, casting its shoes from off its feet because it finds all ground holy, lamenting over itself, and testing itself by the way that it fits things." Judged by these standards we see the progressive nature of horticulture as a fine art.

Many of the fine arts among the ancients, like poetry, oratory and sculpture, scarcely saw an infancy, but sprang like Pallas from the head of Jove into full maturity and perfection. No production of more modern times can surpass the early Hebrew and Grecian poetry—the statues of Phidias are to-day the "Models of all that is noble in expression, elegant in form and chastened in taste," while in oratory Demosthenes will remain alone and unapproachable till the end of time.

On the other hand, horticulture as an art has passed through not only a struggling infancy but a long adolescence, and who

shall say that it has yet attained its majority? Judged by the standards I have named, who can fail to see that by as much as the Roman villa with its formal lines, or the Italian landscape with its architectural accessories excels the gloomy Egyptian plot of rectangular form, with its tanks of water and tufts of papyrus, by so much are the English park, English lawn, and English flower garden a triumph over those.

And it is on the suggestions of the English style that our own horticulture and landscape gardening is for the most part based. Bulstrode and Cobham Hall have been reproduced in the suburbs of Boston and upon the banks of the Hudson.

Nor do we suffer by comparison. It is the judgment of specialists in horticulture—gentlemen of the widest observation and experience, that for beauty and purity of taste, the ornamental grounds of Mr. Hunnewell at Wellesley are unsurpassed by anything of a similar character in either the old world or the new.

Laid out like an English park with its sweeping avenues and endless vistas of velvety lawns, its rustic arches and arbors curtained by climbing vines, and mirrored as it is in the crystal waters of that loveliest of inland lakes—Lake Waban—nothing in Nature or Art seems wanting to make of this charming spot a terrestrial paradise.

At the last Convention of the National Pomological Society at Boston, a few years since, the members were invited at the close of the first day's session to visit Music Hall. Ostensibly it was to be an Organ Concert, but the members of the Massachusetts Society had prepared for their friends a Horticultural surprise. It was a feast of plants and flowers. Around the entire Hall were arranged in endless profusion the choicest of flowers and most exquisite of trailing vines. Its body was filled with towering palms, foliage plants of infinite variety, and all the rare exotics which the wealth of the tropics could furnish, while the organ was embowered in ferneries, hanging baskets and rustic stands. It seemed as though the greenhouses and conservatories of the whole metropolis, with all its suburbs, had been emptied of their contents to make of Music Hall one great conservatory for the gratification of their guests.

As we stood upon the platform, gazing upon the never-to-be-forgotten scene, beautiful beyond description, a delegate from a distant State, lost in admiration, exclaimed in a sudden burst of enthusiasm, "I tell you Boston is the only city in the world that could do this thing!"

This tribute, coming as it did from no mere tyro, but from a gentleman of extensive travel and the highest culture,—the oracle of his section,—was as significant and just as it was involuntary.

But he might have added with equal truth, Boston is the only city in the world that can boast a horticultural society like the Massachusetts, and it is the Massachusetts Horticultural Society that has accomplished these results.

And may not we indulge in some measure of self-gratulation at the success attending the aspirations and the efforts of our own society of Worcester County? Of the success it has attained in the pomological department in the introduction of the choicest varieties of apples, grapes and pears, the impetus given to the cultivation of the small fruits, of the habits of close observation acquired by its members by attendance on its weekly meetings, the excellence and perfection of fruit attained by growers in their generous emulation for its prizes, the practical and scientific knowledge disseminated by its valuable library and by the annual reports of its accomplished Secretary, each one of them a rare intellectual treat as well as a contribution to literature—of all these it is not my province to speak.

If I have construed aright the aims of the founders of this institution, its mission is largely an æsthetic mission, the creation of the beautiful, the adornment of houses and grounds with those forms of beauty in which nature so profusely abounds, which delight the eye and cultivate taste and elevate character, raising man above the dull routine which a cold formal course of an every-day business life has taught him. That this Society has at least in some measure accomplished these results, let the ever-increasing excellence of our weekly floral displays testify. And let the new forms of beauty our city is taking in every direction in lawns, and shrubberies, and in both its private and public grounds bear witness. And yet it is hard for many to learn the lesson, that the life is more than the meat, that the body is more than the raiment.

To how many of this generation, still uttering the old lament, "what shall I eat and drink, and wherewithal be clothed?" does our Lord's rebuke apply with tenfold force—"Behold the fowls of the air, they sow not, neither do they reap, yet your Heavenly Father feedeth them." "Consider the lilies of the field, how they grow; they toil not, neither do they spin. And yet I say unto you that not even Solomon in all his glory was arrayed like one of these."

This Society has been and doubtless always will be—all societies and all institutions, whether public or private, for the spiritual and æsthetic development of man, always have been and always will be—confronted by the Judas-like enquiry, prompted by the same meanness of spirit: Why is all this waste? Why was not this money given to the poor? Or by the old utilitarian

cry *cui bono?* For what good is it? What is all this worth? How does all this expenditure of time and money pay? As though the habiliments of the soul, the garments which clothe the immortal mind, could be bought with gold! As though the elevating influence of splendid architecture or the refining power of some master-piece in painting or sculpture could be measured by dollars and cents! As though happiness and peace and that intellectual pleasure of the true lover of nature and art could be purchased by even wealth untold!

Why were these powers of the soul given us by our Creator—this love of harmony and sweet sounds—this exquisite susceptibility to beauty in every shape—this desire to reach after those things which are above and beyond our present state of existence, higher and nobler than the dull routine of daily life can furnish? Why should we feel such thrills of pleasure in the contemplation of nice proportions and the delicate arrangements of light and shade? Why revel in the pleasing fictions of the imagination from the pen of the poet or novelist? Why should the laughter of the ocean-wave, the roar of the tempest, the diapason of the thunder, the gorgeous hues of sunset, the incense of flowers, produce within us such alternations of emotion from quiet happiness to rapturous delight? Why were these powers given us unless to gratify and cultivate? And why should man, made but little lower than the angels, created with all these susceptibilities and capable of this infinite variety of enjoyment—why should he make of himself a mere machine, plod on day after day, worship Mammon as the god of his idolatry, pass through this earthly pilgrimage unloving and unloved, and die with no more knowledge of those noble faculties undeveloped in his soul than the merest clod beneath his feet?

God made not man for such a fate. And he who shuts his eyes to all the wonders of art, to all the beauties of the external world, who will not satisfy these cravings of his immortal nature—such a man but half fulfils the great end and object of his existence. He refuses to glorify his Maker by a tribute of praise and gratitude for all these manifestations of His benevolence with which he is surrounded—refuses to employ those means which the Almighty has placed in his power by which he may not only render his earthly life more happy, but better fit himself for an eternal life when this his earthly life shall end.

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society:

Your Librarian, in the discharge of the usual custom of reporting upon the condition and use of the Library, is happy to say that the Books and Pamphlets are in good order, and none have been lost. The number taken out during the year just closed is 452, being a small increase over the amount reported last year, while the number consulted at the Library is very much greater.

Your Librarian in looking through many of the illustrated works on Horticulture in the Library, has been surprised to see the wealth and beauty of the illustrations, and I am sure that if the members of the Society would acquaint themselves more generally with these valuable books with which our shelves abound, they would be the gainers thereby.

The additions to the Library during the past official year, by purchase and donation, are as follows:—

Hand Book of British Fungi; 2 vols.; with full description of all the species, and Illustrations of the Genera; by M. C. Cooke, M. A.; Society.

The Esculent Funguses of England; containing an account of their classical history, uses, characters, development, structure, nutritious properties, modes of cooking and preserving; by Chas. C. Badham; Society.

History of the Massachusetts Horticultural Society; 2 copies; Society.

New and Rare Ferns; by E. J. Lowe; Society.

Ferns—British and Exotic; 8 vols.; by E. J. Lowe; Society.

Department of Agriculture; 1879; Report of.

The Grasses of Great Britain; Illustrated by John E. Sowerby; Ed. by Charles Johnson; Society.

Elwes' Monograph of Lilies; A Monograph of the Genus Lilium; by Henry John Elwes; a very valuable work; Society.

A general Index of the Agricultural Reports of the Patent Office for 25 years from 1837 to 1861, and of the Department of Agriculture for 15 years from 1862 to 1876; W. W. Rice.

Power and Movement of Plants; by Darwin; Society.

Proceedings of Portage Co. Horticultural Society; Andrew Willson, Secretary; Ravenna, O., 1879, 1880.

Curtis' Botanical Magazine; by J. D. Hooker; 1880; Society.

Transactions of Illinois Horticultural Society; O. B. Galusha, Secretary.

Proceedings of the Seventeenth Session of the American Pomological Society; 1879; Marshall P. Wilder.

Revue Horticole; 1879; 1880; Society.

Floral Magazine; 1880; Society.

The Home Garden; by Ella Rodman Church; Society.

New Book of Flowers; by Peter Henderson; Society.

Transactions of the Massachusetts Horticultural Society; in two parts; 1880; Robert Manning, Secretary.

Vick's Monthly Magazine; 1880; Society.

The Garden; an Illustrated Weekly Journal; 1881; Society.

The Gardener's Chronicle; Vol. 14; weekly journal; 1881; Society.

The American Entomologist; new Series; 1880; 2 copies; Society.

The Agricultural Gazette; London; 1881; Society.

The Villa Gardener; 1881; Society.

The American Agriculturist; Vol. 40; 1881; Society.

The Gardener's Monthly; Vol. 23; 1881; by Thos. Meehan; Society.

The Country Gentleman; Vol. 46; 1881; Society.

The Fruit Recorder; 1881; Society.

The Massachusetts Ploughman; 1881; Society.

Laws and Ordinances of Worcester; 1881; E. H. Towne.

Worcester Directory; 1881; Society.

All which is respectfully submitted.

CHARLES E. BROOKS,
Librarian.

HALL OF FLORA,
November 2, 1881

ANNUAL REPORT OF THE SECRETARY.

To the Members of the Worcester County Horticultural Society:

Twenty-eight years ago, the actual *President* of this Society; to whom, throughout the whole course of a long and honored life, we have been as much indebted for diligent and untiring service; as for munificence, ample as that was; drawing from the keen experiences of a recent visit to Europe, contrasted the Exhibition of our Society on the 23d day of September, in that year, with shows of a like character which he had seen in England. He took, for an example, the "Horticultural Exhibition of all Nations" at Cheltenham, under the professed patronage of Queen Victoria, Prince Albert, and the Emperor of the French:—

"In addition to a very large hall, there were four tents for exhibition, whose united length was 1300 feet, and the width of the tables was nine or ten feet. Three bands of music, with different instruments, played in turn in the beautiful garden." * * *

"The English show presented a variety of most rare and splendid flowers, in such size and perfection as it is difficult, with any expense, to attain in this climate. Except the Roses, and they were very choice and perfect, and some new and costly Petunias and Verbenas, and a few other flowers not easily to be procured, the flowers were of the kinds cultivated with difficulty and great cost, by artificial heat. The space occupied by the department of Fruit and Vegetables, in this extent of 1300 feet of tent, was not, in my opinion, larger than one of the tables of this hall;—not more than seventy feet.

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There was but one plate of Peaches, which were large and beautiful, raised by artificial heat, such as in the month of May were sold in the London market at 10s. sterling, or about $2.50 for each peach."

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"I do not remember any Pears at that show, and I saw few in

England. The season was said to be unproductive for that crop. The Apples were few and inferior." * * *

"There was but one plate of Tomatoes and this, in mid-summer, though an excellent specimen, was not better than the box which our Vice-President, John C. Whitin, Esq., of Northbridge, sent to me, and I exhibited extensively to the members of this Society, in February last. The result of the proposed comparison may thus be distinctly stated. The English Exhibition was a display of rare luxuries, which like the privileges of the favored classes in England, are not within the reach of the great body of the people."

Doubtless the Foreign Exhibitions have been developed in extent and variety, as well as in the interest of popular instruction. But it may well be assumed that our own Society has kept more than a measured pace with that advance. Certainly, within the last two (2) years, the progression has been rapid, and marked, beyond precedent. I attribute this throbbing vitality—which animates your associated action, to the policy adopted by your TRUSTEES, not so long since, of regarding excellence as a *sine qua non* in every and all articles submitted for competition and official approval. Mechanics Hall has been found too small for your contributions, when your ranks were less numerous, and the state of public affairs was not especially propitious. At present,—you could easily fill the Rink to repletion, without Orchard or Garden betraying any deficiency. It has been your wise election to do better. And yet,—although your weekly schedule was limited to perhaps a dozen specific articles, the Hall of *Pomona;* larger than when the *senior* Salisbury delivered that address; has proved almost inadequate for the recurrent displays, and their constantly swelling throng of admirers. That matters are managed somewhat differently, at present, even in conservative England, may be inferred from the following remarks of a close observer and unsparing judge,* who nevertheless leaves room enough for a suspicion that further improvement is still possible:—

"For a well-managed Horticultural Society is not a grand patronage affair of marquees and elephants, big prizes and military bands, wet days and financial collapse; but a broad-based, economically-managed

* *Garden, The.* Aug. 13, p. 211.

institution, whose sole aim and effort should be to engender and promote a genuine love of gardening: regarding the Annual Show as merely an imperfect exponent of the work done, and not as its sole aim and purpose. Successful Horticultural Societies do not depend so much upon the length of the subscription-list as upon the *bona fides* of the Officers and Committee. Permanent success is not to be gained by the spasmodic efforts of people whose only motive is glory, or fourpenny bits."

That was somewhat of a random stone, yet it cracks glass across the Atlantic. The *Chairman* of the Floral Committee, ignoring the marquees and elephants, yet retains visions of Rinks and Electric Lights;—of a darkness alike palpable or visible, and of a heat indisputably infernal; of gold medals for instruments evoking aught but harmony; and of a male rivalry wherefrom the element of good breeding was painfully lacking. His apology for getting mired in that morass,—holding the official relation to you that he does, may be summed up briefly:—loyalty to a friend who was true as steel in time of trial; and an inexhaustible willingness to spend, and be spent in the service of Worcester—City or County. But—those "wet days" and the consequent "financial collapse"! is it prophecy?

Advance our standards! is not simply a poetic phrase: but rather an injunction, or *mot d' ordre*,—which flies along the ranks, inciting each to do his utmost, to gain and uphold a worthy position. If those of you who visited Boston, upon a recent memorable occasion, were surprised, it could not have been with any painful emotion. For now you cannot help but know and realize; what I have so often insisted upon in these Reports;—that Worcester can grow as goodly a crop as any garden since Eden; that her soil is still fecund; and that her yield is exhaustless:—whether the demand is to fill the halls of State with Judges or Governors, or exacts that more beneficent harvest of Flower, and Fruit, wherewith a bounteous Nature maketh glad the heart of man. In whatsoever we are inferior, it will be our privilege to supplement deficiency: but, at present, the members of this Society may well decline to concede to any, a position of superiority, as sincere and successful votaries of Ceres, Flora, and Pomona.

And why should we not take and maintain the lead in the

Horticultural race? The unwasted vigor of youth is with us; and the flame of emulation burns, it may be, perhaps too brightly. The City, it is true, keeps growing: but the country is not yet so far repelled, that distance and time are factors to be computed in estimating our chances. The venerable MASSACHUSETTS SOCIETY labors under some disadvantages; at present weighty, and, in the nature of things, sure to prove more onerous; from which we are likely to be exempt. For unless Worcester shall attain the magnitude of Boston,—the time is in the dim future when the Halls of this Society shall not be accessible from Gardens and Farms, if not immediately contiguous, yet but a short and charming drive distant. Veterans of the MASSACHUSETTS SOCIETY have confessed to your *Secretary* that they could discern but slight prospects that their places, in the order of Nature soon to be vacated, will ever be filled. The eager attendance upon our Exhibitions of the last two years; so much animated by youthful ardor; dispels from my mind, at least, any similar apprehension for the continued welfare of this Society. Should it, at last, after an honorable rivalry, be our proud fortune to achieve the first place; as the second has often been conceded by an authority from which there can be no appeal;* our friends, who will simply not have retained the lead, may find partial solace in the lines of the poet:—

> "To teach his grandchild draughts then, his leisure he'd employ;
> Until, at last, the old man was beaten by the boy."

And as much in the reflection that Elijah did not drop his mantle—on a descending grade: nor, at all, until a worthy successor was found.

But just at this hour of writing, as in the Autumnal Æquinox the natural equilibrium is jostled; and, amid hurricane, drought, with fierce conflagration, man begins to mistrust the Promise that "seed-time and harvest shall not cease" the tolling bell and dull boom of artillery startle our ears, warning us that fruition again disappoints—that the fairest hopes of a Nation are once more blighted. The growth may be symmetrical;—its development from one year to another stately and tall;—until, at last, when

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* Marshall P. Wilder.

we anticipated with the completest assurance protection and shelter beneath its spreading branches or beside its massive trunk; it falls! stricken at the root by something beyond our calculation of probabilities—so inconceivably despicable is it—so foul and loathsome! The parallel comes home to us—Horticulturists. Yet, by whatever light it may be viewed, the lesson is always the same.

"Whatsoever thy hand findeth to do, do it with thy might."

"In the morning sow thy seed, and in the evening withhold not thine hand: for thou knowest not whether shall prosper, either this or that, or whether they both shall be alike good."

In the remoter centuries, thus spake the Preacher. For well nigh Forty Years you have followed his instructions. As citizens,—or associates of this Society,—what better can you do than to adopt them as your guide through remaining life?

"Would it had struck me instead!" was the outcry of that son of thunder *—our own Boanerges,—as the lightning from heaven shivered the dying Oak before his very door. Did he not do it with his might? With his hand to the plough,—when was he known to turn back? The inwrought convictions of himself, and of men perhaps similar yet not actually like him; leavening the whole lump; made it possible in this Republic to have a President worth choosing. Without his active career, and that of those his first fierce adversaries and subsequent disciples, it is doubtful if we should have had, for many another dreary year, a President worth lamenting. True and thorough: when his life-work was done; though he would never own it—possibly did not see it; he became almost as devoted, in more placid days, to the work which is so usefully prosecuted in these Halls. Apt,—as diligent, to learn; he was always cheerful to instruct. Ready to advise, if solicited; he had also the infinitely rarer quality of being a patient listener.

In these sere days of Autumn, this chaplet is laid upon his fresh grave by one who seldom agreed with him in opinion upon public affairs; but who had learned, amid the conflict and

* Stephen Symonds Foster.

storm of political passion and prejudice, to estimate and duly prize the rugged tenacity and sturdy uprightness of—possibly the Last of the Puritans.

"After life's fitful fever,—he sleeps well."

The development of the STRAWBERRY market, throughout the City and County of Worcester, has continued with, if possible, accelerated momentum. Whether as much has been gained in the production of better varieties,—or in widening and deepening the knowledge of methods of improved culture,—may be doubted,—*with emphasis.* This latter statement can be modified, perhaps, if demonstration shall crown audacious experiment; and success result from the problem now on trial at the base of Newton Hill. But the Goddards did succeed along the newer Holden road; and there should be no insuperable obstacle to the triumph of a similar enterprise, on a far larger scale, when undertaken by *the* "Sovereign of Industry."

Yet, with reference to varieties, what real advance has been made? The *Charles Downing* is even more generally approved: but it has been known, and commended, for years. Its wider acceptance only goes to show that the common vision is clearer,—the public appreciation more acute,—than in the days when the *Wilson* was esteemed good enough for that pet and pride of Massachusetts Ornithology, the *Turdus migratorius.* We have now, it is true, an endless list of recent seedlings; tested by our vigilant members who would have the most prolific; without objection to quality, if combined with fecundity; and who, to that end, feel obliged to "prove all things." Might they likewise—"hold fast to that which is good"!

Your *Secretary* sometimes gets discouraged as a preacher of the true evangel. He remembers, however, that, in days of yore, he once or twice essayed the political conversion of the sturdy Free-Soil dogmatists of Worcester,—City and County,—to the use of the pure milk of grade-Democracy. What then if he now fails to persuade you that everything which is novel in Garden or Orchard;—and proclaimed to be the one thing needful, by those who get gain from the blowing of rams' horns; is not inevitably, nor necessarily, an improvement upon the old?

What berries were shown, A. D., 1881, that surpassed, if they equalled, those superb specimens of *Triomphe de Gand* which our honored associate—the late Charles Richardson—first, and so repeatedly, commended to your notice? Of that foreign variety which, in the Pomological Catalogue is so widely starred, Mr. F. M. Hexamer said, at the recent Session of the American Society, that "he considered it one of the finest shipping varietiet of Strawberries in the world. He thought growers, in selecting varieties of Strawberries to be shipped, should select those of a firm texture," &c., &c. Yet not a quart of the *Triomphe* was visible, this Summer, upon our tables. Take, as another illustration, the Jucunda! so prolific and thrifty along Olean *Street;*—yet which is but sparingly tested, elsewhere, in the City. Can there be found—can one of you name? a better Strawberry;—one of firmer texture, more shapely form,—one cleaner or handsomer? But you say that you cannot succeed with it! Have you ever tried its cultivation in hills,—in suitable soil—with proper care taken of the plantation? If yes,—and you then failed, you did right to search for something better adapted to your peculiar, local conditions.

I would be the last person to advocate, or use, a road *because* of its ruts. It is the old road,—*Via Appia*,—well-built,—built for all time,—over which I would have you travel oftener, even though you may occasionally profit by a short cut. It was not bad counsel to be off with the old love before you are on with the new. Those who grow Berries, or any other fruit—*to sell;*—find it imperative to try each and all the novelties that are introduced. If a genuine prize is sometimes discovered; more often the stranger turns out to be an old acquaintance,—newly christened. But this Society does not consist solely of those who grow fruit for the market. The majority cultivate a rod or two for private consumption; and lose nothing if they fail to achieve,—because not tempting,—Fortune. For all such—experiment is worse than idle: the tests were made long since. They may amuse themselves in developing new kinds from the seed:—possibly, like the tyro at gaming, profit by a lucky chance. But it will be chance! For who can enumerate the myriad disappointments that have clouded the origin of the

universally approved varieties which may almost be counted upon the fingers of one hand?

Can Strawberries be grown for the market, at a profit?—in this City and its vicinity;—is a question mooted as often as the leisure of Winter loosens the tongue. That some of our members believe their cultivation to be remunerative, cannot be doubted by any one who has kept his eyes open, as he traversed PARK AVENUE; or three at least of the countless roads to Holden. But have any—the most enthusiastic of our local Fragarians,—the assured faith and easy contentment of that facile writer and most extensive grower of small fruits,* in Western New York,—who declares that so long as he can get ten (10) cents per quart for Strawberries, he will continue to produce them, and make money at that? Supplied at any such rate—who shall put a limit to the consumption? Who will buy corned beef, or even porter-house steak,—in the torrid days of June,—when a quart of first-rate Strawberries can be procured for the same or a less sum? He is the truest Horticulturist who shall first demonstrate the fact that this delicious fruit can be afforded thus cheaply. For he will have brought a health-giving luxury within the reach of the very poorest among us; supplementing the meagre list that so quickly expresses and exhausts the capabilities of our wretched American dietary with the choicest of all viands. And, all the while, growing no poorer in purse.

The fruition of the *Peach* crop, A. D. 1881, scarcely equalled the promise held out during the preceding year. There was no single plate of specimens to rival that noble lot of *Early Rivers* from West Boylston; and the Yellows had finally disposed of two or three hap-hazard seedlings, of a flavor to justify the flourish of trumpets wherewith they were introduced. Others, of perhaps equal expectation, have succeeded to their place. And your *Secretary* is as thoroughly convinced now, as he was prior to the advent of the Yellows, or to the lethal frost of A.

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* Mr. A. M. Purdy, of the *Small Fruit Recorder.*

D. 1860–1, that better Peaches* can be grown in Worcester County than in Delaware or New Jersey;—can be grown with as much certainty, and with the absolute assurance of a ready market for all that are not wanted at home. Since home appetites, at home firesides, should first receive consideration.

Of course there will be failures. Some will plant trees whose latent unsoundness cannot be detected until after the lapse and loss of years. Many will be induced to set an orchard in the first spot that comes handy; ignoring, or scorning the knowledge that there is a place for all things: and that the exposure and soil which best suit the Strawberry, or Pear, are not necessarily as well adapted to develop the *Peach.* Temperature;—the direction and force of the winds at the period of inflorescence; nerve to withhold the pruning-knife and saw; (the besetting sin of the average Yankee being, to abuse a sharp tool whenever he gets hold of one;) each and all are conditions to be weighed in the location and after-care of such an orchard.

We cannot, indeed, overlook the fact that much of our land has been cultivated so long, that many essential elements must be, in great measure, lacking. Yet, as new *genera* succeed, after the felling of an ancient forest, flourishing with equal vigor; so do we find an order of profitable sequence in the production of field and orchard crops. It was wisely ordered that monotony should discourage, by poor returns; as well as offend the taste from very sameness. There are hill-sides, and pastures, in plenty,—upon which chestnut-burs no longer prick the chubby-fisted urchin; from whose slopes the White Pine was long since hewn, shaped, and sunk!—in First Mortgages or Preferred Shares. *There*,—might be the habitat of the Peach:—of the Apple! if you prefer that sturdy old friend, whose past is known of all men that ever enjoyed a New England home; and whose future should expand and strengthen with the growth of that foreign trade over whose threshold we have barely stepped.

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* The *Secretary* is too modest, by half! Why does he limit his claim to Peaches? Worcester County is the home of the Apple,—largely the place of its origin. The Sterling; Sutton Beauty; Leicester Sweet; Worcester Spy; Mother; and Hubbardston Nonesuch constitute a list that may well challenge supremacy, if it does not defy competition. E. W. L.

As I look around this Hall, and upon this audience, I can but sadly realize the changes which the seasons have brought, with their inexorable recurrence, during a generation that has passed away. Of Thirty-Five (35) contributors, by whom Ninety-Two (92) plates of Peaches were shown, A. D. 1853, but Two (2) were represented in any, the least degree, at your Weekly Exhibitions throughout the year just closed. A. D. 1856, three years later,—One Hundred and Fifteen (115) plates of Peaches were placed upon your tables by Thirty-Three (33) contributors. Our esteemed associate, from West Boylston; and our Junior *Vice-President;* out of that number, are all to whom we have been indebted for evidence of unflagging interest in the Summer of A. D., 1881. The men,—our valued friends,—have left us: but,—by their fruits, we still know them. For the varieties which they cultivated are yet grown, from choice: and *Cooledge;* the *Crawfords;* with *George IVth;* gratify the palate, as they commend themselves to a more modern and fastidious judgment. *Crawford's Early*, and *Late*, *Melacoton;* as they were styled in our earlier Transactions, upon their first introduction; were rich repayment for whatsoever trouble their origination cost. Only in the same way,—by sowing the pits of choice and healthy varieties,—can we hope to produce kinds that shall be named for us and endure after us. A majority may be worthless: but, if we can originate a Peach like the *Cooledge*, will it not be ample remuneration, of itself To sow and to hybridize! the lesson which Nature is constantly teaching us: as it is the early, the uniform, and the latest injunction of Marshall P. Wilder, in his advocacy of new and suitable fruits for the American Continent. To that laudable end, shall not each of us contribute some portion of sustained effort and energy?

A. D. 1880, Apples could scarcely be given away. During the present season they have been in scant supply for the baby of the family. Those *Gravensteins* and *Porters* that come so handy in the forenoon, as a half-lunch; that are indispensable, after dinner, to those who have once tasted them; and which are never base metal, notwithstanding the proverb, at any hour of the day; are conspicuous by reason solely of their absence. Without *Rhode Island Greenings*, or even *Baldwins*, the pros-

pect for Thanksgiving pies is forlorn enough, while that "delicious maid" must perforce seek the initials of the coming man through some readier response than she is likely to extort from a casual involution of the paring. Yet, there may be a compensation. The overburdened trees are resting, as well as storing up vigor for the crop that may be calculated upon, with reasonable certainty, in the course of the next even year. Shall that crop, if permitted to be excessive, be wasted, like too many that are within memory? Or rather shall not the Horticulturist control this drain upon fecundity, by regulating its exactions, thinning out poor and more especially superfluous specimens? And inflexibly adhering to a fixed purpose of putting a limit to the yield of each tree in the entire orchard? Will it require too much labor? Possibly, if that labor is not remunerated. But has any one present ever tried the experiment, for a series of years, so as to determine, with absolute assurance, what effect, if any, such heroic treatment would have upon an orchard? The writer has gathered ten (10) barrels of the Baldwin from a single tree; a yield which is often exceeded. Suppose now that one-half of that crop had been picked, shortly after they were formed! Does any one doubt that the select remainder would have filled as many barrels; would have drawn, perhaps, as hardly upon the vigor of the tree; but still, through superior size and enhanced conditions of flavor and form, would have commanded a higher price in the market! Suppose, however, yet further, that the yield were restricted to what the tree *ought* to bear; and who ever had, or will have the courage to thin to that extent? have you not faith that a demand would arise where none existed before; and that the very tempting appearance and evident high quality of the specimens must attract and secure purchasers? What return do you expect from an acre of land set in Apple trees? Has pomological covetousness no other limit than that

> "They shall get who have the power;
> And they shall keep who can?"

Will not one dollar per barrel, net, pay a fair return, should you get five (5) barrels from a tree? But if, contenting yourself with a less yield, of still improved quality, you could manage to obtain such a return each, instead of every other, year, can you

derive an easier or better livelihood from the ensilage of Maize, or a pedigree in direct descent from *Eupidee* or *Maximum?* Compute the proper number of trees to the acre * and you have the sum to answer for itself.

And, with the stern compulsion of necessity constraining us have we,—as Horticulturists,—any alternative? Is it not already manifest that a market exists for the entire produce of our orchards, on condition only that we will earn and merit confidence? For your inspection at leisure, and that you may duly appreciate the opportunity which the orchardists of Worcester County may take at the flood and follow on to fortune, I have collated the subjoined tables from the London *Garden;* asking you to mark especially the absence of certain varieties, from these tables, like the *Hubbardston Nonesuch* for example, that might seem to be of the first value for commercial purposes; and the undue prevalence of others to which here, in Worcester County, we attach little or no value:

Apples—Exportation during nine one-half ($9\frac{1}{2}$) months, from August 1, 1880, to May 14, 1881.

From New York	barrels	599,200
" Boston	"	510,300
" Philadelphia	"	9,872
" Montreal	"	145,276
" Halifax	"	24,250
" Portland	"	39,908
" Annapolis	"	20,000
		1,348,806

Between the 15th and 22d days of December, A. D. 1880, there arrived at Liverpool 27,785 barrels of apples. To the middle of May, A. D. 1881, there had been received, at that port, the enormous aggregate of 692,550 barrels against 240,550 in the year 1880. Now you will be curious to know what return they made after travelling so far. The prices current for different varieties, January 1st, A. D. 1881, were thus stated:

*At a distance of thirty (30) feet between the trees there could be planted: Imperial acre, 48; Scottish acre, 60; Irish acre, 79 trees.

American.			Canadian.	
Newtown Pippin,				
Good to fine,	15s 0d	28s 0d	No Quotations.	
Ordinary to fair,	8s 8d	14s 0d	0s 0d	13s 6d
Baldwin,	9s 0d	14s 6d	13s 0d	17s 6d
Greening (R. I. [?])	9s 0d	12s 6d	15s 0d	16s 0d
Russet, (Roxbury [?])	10s 6d	13s 0d	13s 0d	15s 3d
Golden Russet,	12s 6d	14s 3d	16s 0d	18s 3d
Spitzenberg,	12s 9d	13s 6d	14s 6d	16s 9d
Seek-No-Further,		11s 6d	14s 6d	17s 6d
Lady,	18s 0d	34s 0d		
Vandevere,	11s 6d	14s 9d	0s 0d	18s 3d
King of Tompkins Co.,	0s 0d	0s 0d	0s 0d	18s 6d
Northern Spy,	0s 0d	0s 0d	13s 9d	14s 9d
Canada Red (Nonesuch),	0s 0d	0s 0d	17s 0d	17s 6d
Phœnix,	0s 0d	0s 0d	17s 3d	18s 0d
Pennock,	0s 0d	0s 0d	0s 0d	0s 0d
Swaar,	0s 0d	0s 0d	0s 0d	14s 0d
Talman Sweet,		12s 0d	0s 0d	14s 0d
Twenty Ounce,	0s 0d	0s 0d	0s 0d	0s 0d

Mark how justly Pennock's Red Winter is valued and then calculate—the privilege of every Yankee with a *pedigree !*—whether or no the *Lady* Apple can be grown in Worcester County and laid down in Liverpool for from four (4) to eight (8) dollars per barrel. There is no law to prevent your exportation of other varieties ;—such first-rate and good keeping kinds, for instance, as the *Hubbardston Nonesuch* and *Porter*. Receipts for home-made pies, as well as for long and short sauce, would add little to the charge for freight, and would be a handy thing in the home of John Bull who has behaved, *for him*, unusually well of late ;—not even obstructing our catch for fish-balls.

Five months later, when the supply must have been restricted to what stock had been kept along in cold-houses; the chances of decay during an ocean voyage, throughout the vernal months being too great to risk; the quotations in Covent Garden betray marked appreciation. I would simply say of one variety—the *Romanite*—held at 18s 9d, that if it is what was known by that name, along the Ohio River, forty years ago, when and where your *Secretary* first and last saw it, no member of this Society would tolerate it in his orchard. But, you await the figures !

American.			Canadian.	
Newtown Pippin,	12s 9d	24s 6d	16s 0d	20s 0d
Baldwin,	14s 0d	18s 6d	15s 0d	21s 0d
Greening,	11s 9d	14s 3d	15s 3d	17s 0d
Russet,	14s 0d	18s 0d	16s 9d	26s 6d
Spitzenberg	16s 0d	18s 6d	16s 0d	23s 3d
Spy, Northern,	14s 0d	16s 0d	16s 3d	19s 3d
Seek-No-Further			16s 6d	20s 0d
Russet, Golden,	19s 0d	22s 0d		
Romanite,	18s 9d			
Phœnix,	16s 0d	18s 3d		
Canada Red (Old Nonesuch)	18s 0d			

This, upon May 21st, A. D. 1881.

The whole aim and tendency of this Society, more especially during the last decade, has been in the direction of quality, as opposed to quantity. To that end, we discarded generalization, preferring rather the distinct species within which we would choose that comparison should be restricted. Each variety has stood upon its own merits, if any it had, and the perfection of the specimens became, as it should, the sole test of pre-eminence. Baldwin was contrasted with Baldwin, and not with Pennock's Red. In short, ploughing was no longer done with "an ox and an ass together."

Nor were imperfections tolerated, as a rule. Wormholes; specimens, perfect save from the casts that alone gave outward indication of ravage; knurly, or cracked, as many varieties appear to be, in recurring seasons, without evident prevention or remedy; all have been deemed fatal defects and, as such, incurred the just penalty of inferiority. So that now a premium won, in our Society, means actual desert:

"Palmam qui meruit, ferat."

Is not excellence everywhere appreciated? Do you suppose that John Bull—stolid as he is assumed to be—attained his place at the head of the commercial world because he did *not* know how to transact business? Think you that shoddy is an American monopoly, or that only Yankees can properly do what is attributed to *Deacons!* To show that the careful selection of sound specimens, from the best varieties, would meet with its due reward, let me adduce the opinion of Mr. Walter Draper, of

Covent Garden, London,* to whose firm most of the apples going to the London market are consigned.

"He says that there would be no objection whatever to the apples being classed, and that sales could be readily found for more than one class, but that the ones, twos, and threes, should be rigidly and conscientiously separated, and kept so in the barrel." * * "Speaking of the state of the packing of the immense number of apples coming from America, during the past season, he referred to the great loss and disappointment incurred from bad packing, brands found to be deficient in that way being evaded by the purchaser. The Canadian apples are much better."

There can be no valid excuse for the improper packing of fruit, whether for exportation or storage at home. The only plea in abatement may be—a saving of elbow-grease. But to this comes in the inevitable demurrer that the lubrication of the pocket nerve is thereby rendered uncertain. Men will toil, year after year, throughout the sweltering heat of Summer, to secure a ton of hay from an acre of ground. Let them have forty (40) apple trees upon the same amount of land, and they would esteem themselves ill-used were they reproached for not taking proper care of them. Yet the excessive crop might be thinned, at the pleasantest season of the year—a labor in which children could be trained to be particularly useful. Nor would it appear to be a great hardship to gather the mature harvest during an Indian Summer. It is doubtless true that the orchard cannot be the sole reliance of our Terræ-culturists. They must live by everything that the earth can be coaxed, or coerced, to yield.

"And the earth brought forth grass, and herb, yielding seed after his kind, and the tree yielding fruit, whose seed was in itself, after his kind; and God saw that it was good."

Worcester County is a good place to live in:—there can be found, in the wide world, none better. But it is no land of tropical profusion and, as well, tropical shiftlessness. It requires some vexation of spirit to wrest a livelihood from our rugged soil; and therefore it is that diversities of cultivation and of crops should be welcomed, and new markets discovered, to be thereafter retained. There ought to be no limit to the demand for

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our *Apples and Pears.* The world is ransacked for new varieties of the Orange—unquestionably more palatable to us because we cannot grow it at home. Why should not the products of our orchards be equally desirable, in climates where, from extremes or vicissitudes of heat and cold, they have been proved of difficult or impossible cultivation ?

It is to be regretted that our *Premium Schedule* exacts such frequent revision. *Stare decisis* would be as sound a motto for such documents, as for the more rigid mandates of the law. But therein lies the problem, always vexed and, as would seem at times, of almost hopeless solution—*What is decided?* After long conference, and comparison of views, we entered upon the official year that has just closed so prosperously, with confidence that, at last, something like absolute assurance was attained. The very first Exhibitions demonstrated the fallacy of such hopes; and rendered it even surer than skepticism had predicted, that, so long as men are of such different minds, no single acceptation of even the clearest phraseology can be expected. Of course, there will be some who incline to cavil, even as the sparks fly upward, and whose casuistry is inspired by all the ardor of selfishness. Their name is not, however, Legion, and their number is far exceeded by the roll-call of the honest majority, whose doubts are entitled to the respect ever accorded to sincerity. Our holy religion was to the Jews a stumbling block and to the Greeks foolishness. How then shall a mortal committee, without the gift of tongues, expound to the satisfaction of all the distinction of varieties that are often, to themselves, without essential difference—*Ομωνσιαν* for *Ομοιονσιαν*—salvation contingent upon a vowel !—or make manifest that the call for Flowers, *Seedlings of 1881*, is not fairly answered by the display, at the end of July, of blooms from plants that were forced under glass !

Take this very instance of a call for varieties: can it, by any possibility be productive of accord or satisfaction ? Just reflect upon the almost infinite number into which the sub divisions of species degenerate and are lost, and behold ! the difficulty. As of yore, in your classification of Fruit, when sweet was contrasted with sour, the boast of Summer with the cull and pride of

Autumn: you have to compare flowers which resemble each other in nothing:—without contrasting or even salient features wherefrom to frame a scale of pre-eminence. It might be far more to the purpose, as it would be much more practicable, to call for stands of distinct species. If you had them not, you could procure them and, sooner or later, achieve the prize. And then there would be diversity enough to save contributors and committees, alike, from mental perplexity and worriment. At present, the great trouble about the varieties is, that they do not vary! Take a stand of *Late Phlox*, for example, on the 22d of September, ulto., with the contents of seven (7) bottles, out of forty (40) identical. Scattered throughout the collection, it is true, for effect, in a sort of irregular skirmishing line, but yet all of one and the same variety. If you will determine that *duplicates* shall not be allowed, hereafter, in any case, a great part of the present causes for embarrassment may be avoided. That is the course which an honest ambition to secure the best displays would suggest, and it is a rule which your *Floral Committee* for A. D. 1881, are unanimous in urging for adoption. While a thing of beauty may be a joy forever, it should not be overlooked that there may be too much of a good thing; bulk and loveliness being scarcely convertible terms.

With reference to the common practice of holding a court of review, after the decision of Committees, because of individual disappointment, it may be worth the while to occupy a moment. Let the Exhibition of July 28th furnish an illustration. Upon that occasion your *Trustees* offered three premiums for Stands of "Cut Flowers," explicitly requiring them to be "Seedlings of 1881." The obvious and natural meaning of the requirement would appear to be, that the flowers shown must be grown from seed sown in the open ground—*en pleine terre*—as our Horticultural *confrères* in France would say, and during the current year. Why else wait so long? If a seed will not germinate and develop before August, when will it? Apples, Peaches, and Pears, bud, blossom and mature; and the *Early Harvest*, *River*, *Doyenné d' Ete*, with an occasional *Citron des Carmes*, have crowded your tables in profuse succession, ere the advent

of the Dog Star with its baleful gleam. An honest purpose conceals no furtive aims. Your *Committee* did not doubt that the germination and growth of plants might be accelerated by artificial methods. They simply decided that the employment of such methods was not within the contemplation of the TRUSTEES when the schedule was adopted.

The London *Garden*, of July 30th, ult., published, as you will observe, within two days of the date when this question arose among ourselves, referring to a superb dish of Gloxinias, quotes from Messrs. *Sutton*, the *Florists* who displayed them, as follows:

"We always treat the Gloxinias as annuals, that is to say, we sow the seed in January, and toward the middle and end of June we have well established plants with several flowers on each such as those sent you. These plants seed and form good, sound bulbs the same season. We thus produce seed and bulbs in one year, instead of sowing one summer for flowers the following summer, and we save, of course, the trouble of one winter's storing."

"We treat them as annuals"—which tells the whole story. Whatsoever may be done with the *Aquilegia*, *Sweet William*, or *Hollyhock;* call them biennial, if you choose, and not inquiring whether they can be forced into premature activity; we have for our own purposes, as Florists, compelled the Gloxinia to mature in the same season that the seed was planted. Your *Committee* concluded that the TRUSTEES had no ulterior purposes in view; that "Seedlings of 1881," was an honest phrase, with no latent interpretation; and that a frank invitation to all involves no lurking snare for one. It is matter for regret always, when individual measure of its own desert outweighs the general estimate. It was the misfortune of the fly not to calculate with greater precision the momentum of the cart-wheel. Entering upon this, the Forty-Second year of a prosperous, and, may we not claim? a beneficent existence, the WORCESTER COUNTY HORTICULTURAL SOCIETY may hope to survive the chilling influence of chagrin, from those who should know better, or the open manifestation of pique, in cases whereof, so far as this Society is concerned, the least said the soonest mended.

"Where ignorance is bliss
'T were folly to be wise."

Another curious idiosyncrasy has developed itself within the

past twelve months. The *Committees* have completed their tasks and the public are admitted. Do competitors ascertain the awards—acquiesce—and cordially admire the display made by each other? Such may be the fact in rare instances. But how is it with those who, finding that the first premium has been awarded to their rivals, do not thank the Olympian Jove that Sparta has worthier children than themselves! Who even assume to call the committees to account, as though the best premiums were their especial, indisputable perquisite? whose wanton with-holding or non-award involves flagrant injustice to the Society as well as to themselves! Tradition assures us that such persons have existed; and Science, in its record of the precession of the equinoxes tells us that the laws of Nature abound in repetition. Trials by jury are not always satisfactory. But appeals to the mob are more senseless, and carry with them less consolation than an invocation of the Goddess of Un-Reason. The judgment of the tribunal is not invariably approved: but chronic discontent is transparent, and its motives are ever accredited with the selfishness that is their obvious inspiration.

Your Trustees have ordered that Flowers should be displayed with their own foliage. That rule is so eminently proper that the Floral Committee of the *New England Agricultural Society*, last September, instructed their *Chairman* to advise its adoption at any future exhibition in the Rink. Might it not be well also, now, to determine in advance to what extent Art, or artifice, shall supplement Nature! Whether, in short, to scrimp material, or in its default, wire may be substituted for the stalk or stem of flowers when cut. If you should conclude that this trick of the Florist, who reduces the bulk of a bouquet at the cost of its life, may be tolerated, you certainly will not sanction the use of such appliances in the arrangement of baskets or other loose floral combinations. Capillary attraction is an essential condition of plant-life, and, without its aid, the bud or blossom, severed from its parent stalk, must quickly wither and die. Suffer Art to foster and develop Nature: never accept it instead.

Your *Committee* would also submit for consideration, by the Trustees, whether it might not be better to defer, as was our

former custom, the commencement of Floral Exhibitions to a later date. They are not strenuous about it, but simply suggest that, held concurrently with meetings for Essay and Discussion, the Exhibitions are relegated to a position of inferiority and scarcely repay their cost. Were they used for purposes of demonstration by practical Botanists, there could be no question of their absolute utility. As it happens, a bouquet is brought in; and now and then a creditable fuchsia or geranium. Should it not receive pecuniary recognition, the committee are blamed for inability to appreciate a modest merit that might as well have continued to bloom unseen. Later in the year, when the Hall of Pomona is literally crowded with deserving articles, the gratuities that were lavished upon the altar of good nature, during January and February, are sadly missed. Our old practice of initiating the series of Floral Exhibitions with a display of *Azalea Indica*, seemed to work well. Possibly Primroses and Hyacinths might anticipate the Azalea by one or two weeks. It will be for the TRUSTEES to determine if anything is gained, by an attempt to combine the visual observation of one thing with mental instruction upon another, that is widely different, if not wholly alien.

The Floral Committee of the *New England Agricultural Society*, of which your *Secretary* had the undesirable honor to be *Chairman*, were painfully impressed by the meagreness, or utter lack, of offerings for many of the choicer species of Flowers. Our own Schedule, great as was the care bestowed upon its construction, was noticeably deficient in that respect. Take, for example, the *Sweet William!* always a favorite; which, latterly, has been invested with a brilliancy and variety of color that might almost challenge rivalry. And then, too, the *Antirrhinum*—or Snap-Dragon! with even greater diversity of light and shade;—ranging from buff to magenta,—and compelling attention were it merely from the peculiarity of its foliage. Three Dollars is the munificent sum proposed, in two premiums, for the best six varieties of the Genus *Lilium!* to whose pristine glory, thousands of years since, the magnificence of Solomon was declared inferior. The Pumpkin Sweet Apple gets as much.

A perfect Schedule may be beyond our attainment. It is worth striving for, however; and the very effort to secure it must be productive of advantage. If a competent sub-Committee could revise the list of premiums as established for A. D. 1881, reporting their conclusions, if thought desirable, to the entire Committee of Arrangements; a decided amendment might be hoped for and, in all probability, realized. Confidence must be reposed somewhere. And you need not go far astray, with the ample ability and experience from which you can select.

And now, with reference to the proper appointment of *Committees* of AWARD;—your *Secretary* desires to repeat advice which is based upon long years of observation. Why should you not choose two persons;—one, and one only, for each, to act upon the respective *Committees* of PLANTS and FLOWERS, and FRUITS and VEGETABLES? The work would be better done;—done more promptly: while your *Secretary*, and *Librarian*, left to their appropriate duties, would yet be able to afford the assistance that is occasionally required in the suitable arrangement of articles. The persons, thus selected to discharge an onerous and thankless task, should be paid a reasonable sum for the time spent in your service. This is a matter that you cannot longer—in justice to yourselves or others—postpone or heedlessly neglect. Gentlemen have purposely refrained from competition in the Floral Department, during the past year, whose earned awards in former seasons were quite considerable. For a competent Judge,—you need and should have an expert and active Florist. In Fruits and Vegetables, you would not require to look far to find one suited, both by long practice and shrewd insight, to meet all the exacting requirements of the position. In both departments,—the advance of the Society has been and continues such that you are in imperative need of the very best talent that you can command.

Not so many years have elapsed since the good taste of our members was rudely offended by the display of what were technically termed Floral Designs. Severe criticism and a more rigid judgment excluded them from our Schedule; and, left without the stimulus of pecuniary encouragement, they have ceased to disfigure our tables. At the Rink, recently, a few

were found, in response to the invitation extended to them; notably a horse-shoe, which met with its proverbial luck. The *Chairman* of the Floral Committee protested, in vain, that the shoe alone was not a type of original design: the opinion of his colleagues concurred against him that the foot in it * must be imagined.

At a late Exhibition of the Horticultural Society, of New York City, a Floral Grand Piano, upon a bed of White Pinks, was the centre of attraction. No envious competitor seems to have thought of the infinite possibilities to be developed from the Harp of a Thousand Strings. There are always, upon such occasions, Mortuary Pillows with their inevitable Requiescat. But why does no one fancy a sweet thing in Coffins! upon a bed of Mourning Bride! Why not idealize a Pyramid, combining in the representation a life-size Mummy recumbent upon the sacred Lotus! Faugh! the whole thing is without meaning and in wretched taste. The evidences of Design are omnipresent in Nature. The work of imitation involves no exercise of genius or originality, and should never be encouraged. Flowers are, of and in themselves, the highest work of Art;—whether you consider the lilies of the field, or those strange Orchids of tropical climes, that are such a puzzle and wonder to the eye. Employ flowers in all their native grace, in whatsoever skill or style of arrangement or combination. But do not entitle distortion symmetry, or resort to the stable or charnel-house for symbols of beauty!

The Trustees, by their formal vote, a year since, authorized the Finance Committee to dispose of such property, including furniture, table-ware, &c., as might not be needed for the use of the Society. Nothing has been done under the sanction of that vote, for good and sufficient reasons. The question arises;—would it not be better to sell all of that property, whether needed or not; supplying the wants of the Society by the purchase of something better adapted to our present requirements and, at the same time, more tasteful in appearance. Our plates are old-

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* The foot in it was that of *His Excellency* the Governor of the Commonwealth, who, having stepped upon the horse-shoe, apologized for the *faux pas* with characteristic readiness and grace. E. W. L.

fashioned in form; and cannot compare, for an instant, with the shapely dishes of modern invention and manufacture. Having dispensed with the cumbrous Annual Exhibitions, we should not need the ampler equipment that was essential when we essayed to gather in all the fruit of Worcester County. Our Weekly Exhibitions will increase in magnitude, it is likely: but Three Hundred plates now may do the work that would have demanded as many Thousands, ten years ago. Our apples of gold are not required to be set in pictures of silver. But the credit of the Society seems to render it imperative that the superb specimens of later years should be fairly presented to the eye. Facilities would thus be afforded to exhibitors, who are now put to unnecessary trouble in arranging their articles; and a saving of time might result to the Officers of the Society, that could be employed to your exceeding benefit. We will not, in our prosperity, despise the day of small things; but, when Seckel Pears get to weighing more than a quarter of a pound, on an average; as happened with every lot, at their appointed exhibition; it is pretty evident that the time has come for "old things to pass away, all things become new."

An invitation was early received by your *Secretary*, from *President* Marshall P. Wilder, conveying an official request that this Society would send delegates, in such number as it might elect, to attend the Eighteenth (18) Session of the American Pomological Society to be held in Boston during three days of September. In accordance with that invitation, and pursuant to authority conferred upon him, your *Secretary* in due time issued credentials to the following named gentlemen:

President, Stephen Salisbury, Jr., *Vice-Presidents*, Stephen Salisbury, Philip L. Moen, O. B. Hadwen, and *Messrs.* Francis H. Dewey, William T. Merrifield, George E. Francis, James F. Allen, Charles E. Parker, Alexander H. Bullock, Calvin L. Hartshorn, Frank J. Kinney, John C. Newton, Sylvanus Sears, Henry Phelps, J. Henry Hill, James Draper, William H. Earle, Henry L. Parker, William W. Cook, Charles E. Brooks, Edward W. Lincoln, Frederick A. Blake, Adin A. Hixon, of Worcester; with J. P. Lynde, of Athol; Paul Whitin and George Cruickshanks, of Whitinsville; F. M. Mar-

ble, of Grafton; Joseph C. Lovell, of West Boylston; Newell Wood, of Millbury; Jona. D. Wheeler, and William H. Wheeler, of Grafton.

An agreement with the Boston & Albany R. R. corporation was effected, whereby an infinitesimal reduction of fare enured to the benefit of delegates. Could a large attendance be assured, it was stated that a less price would be exacted. The argument that a less price would, of itself, tend to swell the delegation, met with no response. That great corporation contents itself, as it has perforce been satisfied throughout the Summer, with the meagre portion assigned to it of a six dollar ($6.00) fare to Chicago. It has transported political and religious bummers, pot-house politicians and theological sectaries up and down the Commonwealth for what could be got, and, at this hour of writing, finds it profitable to organize excursions to Boston, upon its own account, at a marked diminution from its regular rates. A half-million barrels of Apples were shipped from the port of Boston during the past year. It would seem that anything which might tend to foster, or stimulate the exportation of Fruit, from the famed orchards of Worcester County, over their especial lines of rails, would meet with prompt recognition from a sagacious management. The late *President* Lincoln—eminent Horticulturist that he was—not being possessed with the devil of "through connections" to Kamschatka or Timbuctoo; and appreciating "terminal facilities," with nothing to send forward, at their true value; was always keenly sensitive to such local possibilities. Meekly grateful for the smallest favors, which we will trust may not permanently impair the semi-annual rate of dividends, let us bear with resignation the assurance that a new and competing line will soon open fresh ways of transit and traffic between Boston and Worcester, and simultaneously, perhaps, eyes that are now wilfully blind.

Your delegates generally express themselves satisfied with their reception and benefited by their attendance. New varieties of fruit were seen, for the first time, by many, which had been brought from afar and, as such, became objects of interest, although unsuitable for cultivation among ourselves. The dis-

cussions at the formal meetings of the Pomological Society, were a source and centre of attraction, listeners deriving pleasure and profit from the frank narration of experiences sometimes similar, but more often foreign to our own. It might be regretted that the delegates from this Society were so diffident of their position, or so chary of imparting the knowledge derived from years of personal labor and rigid trial. In considering "Grape Culture," for example, gentlemen from Boston or its immediate vicinity, magnified or depreciated, exalted or pulled down, in the name of Massachusetts, varieties that some of us, in Worcester, gather fully ripe, every year. Your *Secretary*, not hearing those statements, of course could not essay the correction of erroneous impressions. But he takes this occasion to declare his implicit faith in his own ability to mature perfectly, in the open air, for successive years, with as much certainty as the Pear, the *Delaware*, the best of the *Rogers Hybrids*, aye and even the *Iona*. True, some have a sunny exposure throughout the day and are besides sheltered beneath a broad coping that, jutting from the wall, is thus constrained to be of service as well as ornament. Others are allowed and will be encouraged to twine around and over trees, even the *Seckel* pear tree being surrendered to their embrace. None of you can have forgotten the cold—extreme for the early date—which proved so destructive on the 4th and 5th of October ult. Four days thereafter I plucked Grapes—a Rogers—in ripe perfection, and as unharmed by the frost as though the mercury had never indicated a degree more frigid than sixty. Should the *Seckel* finally succumb to the *Lindley*, the dead trunk may be trusted to support the vine. But they are getting along amicably, to all appearance, and there is some ground for the faith that the shade and warmth of the vine leaves exert a reciprocal and beneficent influence upon the pear. The foliage and clusters of the vine vibrate with the passing breeze, and the circulation and currents of air appear to ward off the attacks of mildew, which in the judgment of many, is as much the result of stagnation as of aught else. But then, if you must grow your grapes and pears separately, what can be easier or simpler than to plant trees especially for the support of vines?

Reasoning generally, and as to the sum of advantage to be de-

rived from the Eighteenth (18th) Session of the American Pomological Society, it is believed that your delegates would unanimously concur in and perhaps adopt for their own the conclusions of the Boston *Advertiser:*

"The meetings at Hawthorne Hall have been especially profitable, and will result in promoting the still more rapid development of one of the most wide awake and progressive arts of our time."

At Agricultural Institutes; at the stated meetings of Town Societies; and at every reunion of the local Granges; discussion is th spirit, good or evil, that possesses the occasion. Science and speculation; practice, or theory,—term them which you will; contend, in more or less profitable rivalry, to enlighten or confound the audiences then and there gathered So many and so various have been the themes essayed, that it may almost as well be asked, as it was Two Thousand Years ago,—"Is anything whereof may be said this is new?"

"Threshing that old bundle of straw again!" exclaimed the astute Editor, as the orator designated "Honest," to denote the difference between his fellow-townsmen and himself, brought down his well-worn flail upon the empty sheaves of a Prohibitory Tariff.

"Some brilliant flashes of silence!" said the reverend Wit, summing up in an epigram the unwonted deportment of Macaulay at a fashionable dinner.

"There is too much gab, already!" replied the quiet graduate from Yale, when solicited to contribute for the foundation of a school of Oratory at his *Alma Mater.*

And, to come to the point! are the calling to order; the installation of a Chairman; the formality and starch of a set meeting; listening to what you are told and believing what accords with your previous convictions,—"only that and nothing more"; are these, one or all, fundamental conditions of Horticultural existence? Do not the Summer Exhibitions answer as good a purpose; with their freedom from ceremony or constraint; whereat the tongue wags at will, and people come and go, moving hither or thither at their convenience, as best suits them!

A list of the topics that have been considered, during the last

two or three Winters, is elsewhere given in this report. The great majority were instructive; having been prepared with care and study; and evincing the sound judgment and matured experience which established the fortunes of their authors; constituting them, at the same time, expert witnesses upon the subjects that they were invited to explain before this Society. A few were treated with less precision of statement than we were warranted in expecting. And it is exact information that we crave: of speculation, and inference from baseless premises, there is more than enough. For no silo is yet invented, to provide for mental decomposition and ferment: were such even wholesome intellectual food.

A suspicion has once or twice perplexed your *Secretary*, that gentlemen might anticipate that they were to address an audience from the rural districts; and that elaborate preparation would be thrown away upon fat-witted clod-heads. The frigid response to immature thought, or crude preparation, must convince such, if such exist, that study is a good investment; and one which, sustained by ripe judgment, will never lack appreciation in "provincial" (if that is correct cockney?) Worcester.

Shall those meetings be continued through another season? They are certainly worth perpetuating, if they can be kept up to the standard hitherto maintained. But the Society has a reputation—to lose! and cannot afford to assemble, week after week, merely to advertise those who aim to push themselves into notoriety. Topics of vital importance to the "practice and Science of Horticulture" have been well considered during the last three (3) Winters. It may chance that the supply of themes is not yet exhausted; that essayist and lecturer may still fall a helpless prey to the untiring energy and cunning wiles of our artless *Chairman of Arrangements.* One or two subjects, accidentally omitted or left incomplete, last Winter, might supply a firm foundation whereon to rear a noble fabric of instruction, should it be your ultimate decision to persist. But we must resolve to be content with nothing that does not tend to augment the sum of precise knowledge; not absolutely rejecting hypothesis, but regarding or admitting it solely as a possible method of detecting the true from the false.

Your attention has been invited, in former Reports, to the invidious discrimination against the Real Estate of this Corporation which is practised by the Assessors of Worcester. The *Constitution* of Massachusetts declares that "it shall be the duty of legislators and magistrates, in all future periods of this Commonwealth, to cherish the interests of Literature and the Sciences, &c., to encourage private societies and public institutions, rewards and immunities, for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and a natural history of the country," &c., &c. In observance of that injunction, the General Statutes of the Commonwealth exempt from Taxation :—

"The personal property of literary, benevolent, charitable, and scientific institutions incorporated within this Commonwealth, and the real estate belonging to such institutions occupied by them or their officers for the purposes for which they were incorporated."

The *Worcester County Horticultural Society* was incorporated, A. D. 1842, "for the purpose," as explicitly stated in its charter, "of advancing the science and encouraging and improving the Practice of Horticulture." From that time to this, it has received legacies and been the object of benefactions from good men and true; of whom some were living when the Constitution was adopted, while all were thoroughly imbued with its spirit; as well as persuaded of the wisdom of that especial provision, just cited, favoring "rewards and immunities" for the promotion of "agriculture, arts, sciences," &c., &c. Yet, throughout the entire period; as soon as, by foresight and thrift, this Society became possessed of a house of its own, wherein the more efficiently to prosecute its "purpose" and thereby justify its existence; its property has been mulcted in sums amounting, at this date, to more than the original cost of our Hall.

In the early Winter of A. D. 1880, the Trustees of the Society arranged a series of meetings, upon successive Thursdays, for the express "purpose" of more effectually "advancing the science and encouraging and improving the practice of Horticulture." Topics of universal concern were selected; and gentlemen, thoroughly informed, were secured to introduce and

elucidate them. To refresh your memories,—a list of those topics is subjoined :—

A. D. 1880.

January	29.	Exhibiting and Judging Fruits and Flowers.
February	5.	Manures and Fertilizers.
"	12.	Growing and Marketing Small Fruits.
"	19.	Window Gardening and Winter Flowers.
"	26.	Out-Door Flowering Plants.
March	4.	Orchard and Vineyard Fruits.
"	11.	Does Horticulture pay? And how?
"	18.	Trees and Shrubs for Ornamental purposes.

A year later, a similar series of meetings was held, whereat the themes assigned for consideration, were as follows :—

A. D. 1881.

January	6.	Birds and Insects injurious to Horticulture.
"	13.	Fruits and Flowers of Tropical America.
"	20.	Chemistry.
"	27.	Roses and their Culture.
February	3.	Orchard and Garden Fruits.
"	10.	Cultivation of Small Fruits.
"	17.	Evergreen and Conifer trees.
"	24.	House Plants for Winter.
March	3.	Æsthetics of Earth Culture.

And, preceding either series of meetings, with their preliminary essays and subsequent discussions, you had procured, and offered to the community, a course of Lectures on Botany, by an eminent Professor in the University at Cambridge, an authoritative abstract of which was afterwards published in your Official volume of Annual Transactions.

During those three years, at least, if at no other period!—years replete with Exhibitions; and affluent with the rare and ripe fruits of learning and scholarship grafted upon experience; were you "advancing the Science and encouraging and improving the Practice of Horticulture?" By accepting your Charter, you took that Trust upon yourselves. If you have discharged it faithfully, and to the best of your ability, your property is exempted from taxation by the Statutes.

The Assessors of Worcester are evidently of opinion that you have not fulfilled that Trust: since they have doomed your entire Estate, which they would not otherwise have done, as

"magistrates" enjoined by the Constitution to "cherish the interests of Literature, and the Sciences," &c., &c.; to encourage private societies and public institutions, rewards and immunities, for the promotion of agriculture, arts, sciences," &c., &c.

Some, who are disposed to concede your right to "immunity," would yet restrict it to the bare Hall of Pomona; as being that portion of the Real Estate of the Corporation which is most largely used for your technical or scientific purposes. But the rest of your Estate is permanently leased, as the whole is occasionally; because your necessities compel: because the rents derived therefrom constitute your only means for stimulating research and rewarding successful achievement; because, if one per cent. can be levied lawfully, one hundred per cent. might be, to the extreme of confiscation:—in that way violating the theory of the Constitution and evading its letter which would "cherish" and protect such "immunities."

I have also, in former Reports, asked you to take notice of an apparent lack of impartiality, on the part of the Assessors, in the allowance of actual exemption from Taxation. It does not appear, from the books of the City Treasurer, that a dollar is received from assessments upon the property of any Religious Society in Worcester. Yet such Societies are notoriously,—even ostentatiously engaged in rivalry with "private societies and public institutions," which have no other resource than their rents wherefrom to supply "rewards for the promotion of agriculture (Terræ-culture?) arts, sciences," &c., &c.; and even maintain kitchens for the pious delusion and snare of the unwary who anticipate, in a theological soup, somewhat more than a gill of oysters to the quart of *water!* Thin! do you say? "Too, utterly, too"!

The Statutes relating to "houses of religious worship" enact that "portions of such houses appropriated for purposes other than religious worship, shall be taxed at the value thereof to the owners of the houses."

At Puritan "Chapel" a woman lectures upon "the development of character in schools—tickets 15 cents." All the while there are spacious entries and halls, unused; in the High-School Building, which cost a Quarter-Million; that might seem pecu-

liarly appropriate for such disquisitions, were Schools the proper place for developing "character." "Suffer little children to come unto me!" at fifteen cents each.

Yet again,—at Jeru ?—salem "Church" a Concert is advertised of "Mendelssohn Four Part Songs," "with Cornet and Violin Solos, Songs, Duets, and Readings. Tickets 25 cents." It is unquestionably according to the canons to "make a joyful noise unto the Lord!" but that the "noise" should be in four parts argues a division savoring of dissonance, and warrants a doubt as to the share that the Lord may have in it:—more especially when it is set to the tune of twenty-five cents! But—the while,—the Assessors, like Baal—were deaf! or had gone to Oak Bluffs! and, not being at hand, could not detect the "appropriation to purposes other than religious worship."

Once more we are among the Puritans; but, on this occasion, in a "Vestry;" and the "religious worship" is restricted within the somewhat contracted outlines of "English Literature and History." The theme is more dignified and the price is varied,—to correspond. For "Three Dollars"! you can spend your evenings at the Mermaid, with Shakespeare and Ben Jonson; sip at the wells of English,—pretty thoroughly defiled by the minor play-wrights of the Elizabethan age; or go on a jaunt with Chaucer's pilgrims. Waiving inquiry into the present validity of the Apostolic injunction:—"Let Woman keep silence in the churches!" it may not be impertinent to ask whether she should hasten to uplift her voice in a recital of the Wife of Bath's Tale!

And, still! no "portion of such house" not even that "vestry," is "taxed, at the value thereof, to the owners."

In the opinion of your *Secretary*, you are imperatively required, by every dictate of reason,—every sentiment of self-respect, to recover the sums that have been unjustly extorted from you. Acquiescence in such exactions may not lead to greater wrong: but it would be an admission, on your part, that Horticulture is not a "Science"; or that you are not "advancing" it,— the "purpose" for which you were chartered. And,—if you are *not* fulfilling the objects of your organization;

the sooner that you dissolve the Corporation, and cease flaunting an imposture before the Community ;—the better for your own good name and the common weal!

All which is respectfully submitted, by

EDWARD WINSLOW LINCOLN,

Secretary.

HORTICULTURAL HALL,

Worcester, Massachusetts, Nov. 2d, A. D. 1881.

OFFICERS AND COMMITTEES

OF THE

WORCESTER COUNTY HORTICULTURAL SOCIETY,

FOR THE YEAR 1881-2.

PRESIDENT:

FRANCIS H. DEWEY, of Worcester.

VICE-PRESIDENTS:

STEPHEN SALISBURY, of Worcester; WILLIAM H. EARLE, of Worcester; HENRY L. PARKER, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

CHARLES E. BROOKS, of Worcester.

TRUSTEES (BY ELECTION):

Paul Whitin,	Whitinsville.	Joseph C. Lovell,	West Boylston.
George Cruickshanks,	"	Newell Wood,	Millbury.
Charles E. Parker,	Holden.	David L. Fiske,	Grafton.
Isaac Davis,	Worcester.	Sylvanus Sears,	Worcester.
James F. Allen,	"	Henry Phelps,	"
Henry Woodward,	"	Nathaniel Paine,	"
William T. Merrifield,	"	Thomas A. Dawson,	"
George E. Francis,	"	J. Henry Hill,	"
H. M. Quimby,	"	James Draper,	"
Samuel Flagg,	"	F. M. Marble,	"
Horatio Phelps,	"	William W. Cook,	"
Frank J. Kinney,	"	Calvin L. Hartshorn,	"
John C. Newton,	"	Joseph Lovell,	"
Emory Banister,	"	Stephen Salisbury, Jr.,	"
John D. Lovell,	"	Edwin Morse,	"
George F. Hoar,	"	Hermann F. A. Lange,	"
Alexander H. Bullock,	"	John Midgeley,	"
Charles O. Thompson,	"	S. H. Record,	"
O. B. Hadwen,	"		

STANDING COMMITTEES.

ON FINANCE:

Henry Phelps, 1882. Nathaniel Paine, 1883. Stephen Salisbury, Jr., 1884.

ON LIBRARY AND PUBLICATION:

Edward W. Lincoln, Charles E. Brooks, Stephen Salisbury, Jr.

ON NOMENCLATURE:

James F. Allen, Henry Phelps, Hermann F. A. Lange.

ON ARRANGEMENTS AND EXHIBITIONS;

James Draper, *Chairman*, James F. Allen, George Cruickshanks, Henry Phelps, Newell Wood, William W. Cook, Charles E. Parker, William H. Earle, Charles E. Brooks, Calvin L. Hartshorn, Hermann F. A. Lange, with *President* Dewey, and *Secretary* Lincoln.

ON FLOWERS, PLANTS, ETC.

Hermann F. A. Lange.

ON FRUITS, VEGETABLES, ETC.

Henry Phelps.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR

1882.

The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

Worcester, Mass.
CHARLES HAMILTON, PRINTER,
311 MAIN STREET,
1882.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

James Draper, *Chairman.*
James F. Allen.
George Cruickshanks.

Calvin L. Hartshorn,
Hermann F. A. Lange,
Newell Wood,
W. W. Cook,
Henry Phelps,
Charles E. Parker,
William H. Earle,
Charles E. Brooks.

President — Francis H. Dewey.
Secretary — Edward W. Lincoln,
Nos. 5 Oak. and 18 Front Streets.

COMMITTEES OF AWARD.

Flowers, Plants, Etc. — Hermann F. A. Lange.
Fruits, Vegetables, Etc. — Henry Phelps.

COMMITTEE ON NOMENCLATURE.

James F. Allen, Henry Phelps,
Hermann F. A. Lange.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premiums must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small Fruits* must be entered in boxes or baskets, but may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

E. Committees may correct, before the close of any Exhibition, awards made by them, if satisfied that such awards were erroneous.

F. The cards of competitors shall be put, reversed, beneath the plates; and the Committees of Award shall be excluded from the Hall of Exhibition until the Exhibition itself is ready for judgment.

G. Competitors are expected to conform strictly to the conditions under which articles are invited. Evasion or violation of them may be reported to the TRUSTEES for future disqualification of the offender.

RULES AND REGULATIONS.

1. Exhibitions will be held on every Thursday afternoon, commencing March 2d, and terminating October 27th, A. D. 1882. The hours of exhibition will be between 3 and 4.30 o'clock. Articles offered for premium must be in the Hall by 2.15 o'clock, P. M., of the days of exhibition. Between 2.15 and 3 o'clock the Hall will be in the exclusive charge of the

Secretary, and the Librarian, who will allow no one else to be present. The Committees of Award will be admitted under the limitations of GENERAL RULE F.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester*, for a period of at least one (1) month previous to the date of exhibition.

3. After the articles are arranged they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove* them until the Exhibition is closed, when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits or Vegetables is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Committees to *exclude from exhibition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste. The Committee on Fruits, in making awards, will especially regard uniformity in size, symmetry of form, and beauty of color.

7. The Committees have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary; and the Secretary is requested to give notice of one week, in some daily paper, and also at the preceding Exhibition, when a change in the schedule is proposed.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables, under different names, or exhibiting as grown by himself, Flowers, Fruit or Vegetables grown by another, thereby violating the objects and rules of the Society, shall be debarred from competing for the Society's premiums until reinstated.

9. No Flowers, Plants, Fruits or Vegetables will be entitled to a premium unless they possess points of superiority; and the Committees are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them; nor shall any specimen for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

11. In all exhibitions of Cut Flowers, the use of foliage must be restricted to that of the varieties shown; and not more than three blooms, clusters, or spikes, all which shall be of one color, and of one variety, shall be allowed in the same bottle, except when otherwise specified in the schedule.

12. No member of any of the Committees for awarding premiums or gratuities shall, in any case, vote or decide respecting an award for which such member may be a competitor, or therein have an interest; but in such case such member shall temporarily vacate his place upon the Committee, the vacancy for the time being to be supplied by the remaining members of the Committee.

13. No Committee shall require anything of competitors, respecting their exhibits, which is not distinctly specified in the schedule. No Flowers, Fruits, etc., etc., shall be put on the tables, for competition for premiums, by any person who is a judge as to the awards to be made for Fruits, Flowers, etc., etc.

14. All premiums that are not claimed within three months after the close of the official year shall be forfeited to the Society.

15. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

16. Twelve (12) specimens shall be required, hereafter, in all cases where Ten (10) was the limit, formerly.

17. "Downing's Fruits of America," revised edition, will guide the Committee on Fruits in its decisions upon matters at issue.

☞ The Committees are authorized, by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

FLOWERS, PLANTS, FRUITS & VEGETABLES.

A. D. 1882.

Thursday, March 2.

AZALEA INDICA.—

No. 1.	Three plants in bloom, three premiums	$5 00	3 00	2 00
No. 2.	One plant in bloom, two premiums.		3 00	2 00

PRIMULA SINENSIS.—

No. 3.	Four plants in bloom, three premiums	$3 00	2 00	1 00
No. 4.	One plant in bloom, two premiums.		1 00	50

APPLES.—

No. 5.	Hubbardston Nonesuch, 12, three premiums	$1 50	1 00	50
No. 6.	McClellan, three premiums	1 50	1 00	50
No. 7.	Mother, three premiums	1 50	1 00	50
No. 8.	Tompkins Co., King, three premiums	1 50	1 00	50

PEARS.—

No. 9. Any variety, 12, gratuity.

Thursday, March 9.

CYCLAMENS,—IN BLOOM.—

No. 10.	Four, three premiums	$3 00	2 00	1 00
No. 11.	One, three premiums	1 50	1 00	50

HYACINTHS,—IN BLOOM.—

No. 12.	Six, three premiums	$3 00	2 00	1 00

No 13.	One, two premiums.....		1 00	50

APPLES.—

No. 14.	American Golden Russet, 12, three premiums	$1 50	1 00	50
No. 15.	Leicester Sweet, three premiums.	1 50	1 00	50
No. 16.	Northern Spy, three premiums..	1 50	1 00	50

PEARS.—

No. 17. Any variety, 12, gratuity.

Thursday, March 16.

CINERARIA,—IN BLOOM.—

No. 18.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—

No. 19.	For stand of twenty-four blooms or clusters, distinct, three premiums	$3 00	2 00	1 00

APPLES.—

No. 20.	Baldwin, 12, three premiums....	$1 50	1 00	50
No. 21.	Belleflower (Yellow), three premiums	1 50	1 00	50
No. 22.	Cogswell, three premiums.....	1 50	1 00	50
No. 23.	Greening (R. I.), three premiums.	1 50	1 00	50
No. 24.	Ladies' Sweet, three premiums...	1 50	1 00	50

PEARS.—

No. 25. Any variety, 12, gratuity.

Thursday, March 23.

RICHARDIA ÆTHIOPICA,—IN BLOOM.—

No. 26.	One plant, three premiums.....	$3 00	2 00	1 00
No. 27.	One bloom, with foliage (the largest)			1 00

BOUQUET—(HAND).—

No. 28.	Seven in. in diameter, exclusive of foliage, or green, three premiums	$3 00	2 00	1 00

APPLES.—

No. 29.	Old Nonesuch, 12, three premiums.	$1 50	1 00	50
No. 30.	Peck's Pleasant, three premiums..	1 50	1 00	50
No. 31.	Sutton Beauty, three premiums..	1 50	1 00	50
No. 32.	Tallman Sweet.....	1 50	1 00	50
No. 33.	Washington Royal.....	1 50	1 00	50

PEARS.—

No. 34. Any variety, 12, gratuity.

Thursday, March 30.

CUT FLOWERS—BASKET.—

No. 35.	For the best, 10 inches around, on stand, three premiums.....	$3 00	2 00	1 00

APPLES.—

No. 36.	Russet (Golden), 12, three premiums.....	$1 50	1 00	50
No. 37.	Russet (Red), three premiums...	1 50	1 00	50
No. 38.	Russet (Roxbury), three premiums	1 50	1 00	50
No. 39.	Spitzenberg, three premiums.....	1 50	1 00	50
No. 40.	Westfield Seek-No-Further, three premiums	1 50	1 00	50

PEARS.—

No. 41. Any variety, 12, gratuity.

Thursday, April 13.

ZONALE GERANIUMS,—IN BLOOM.—

No. 42.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

PANSIES,—IN BLOOM.—

No. 43.	Six plants, distinct in color, grown in 6 inch pots, three premiums.	$3 00	2 00	1 00

CABBAGES.—

No. 44.	Three, two premiums.....		$1 00	50

CARROTS.—

No. 45.	Ten, Intermediate, two premiums.		$1 00	50

RADISHES.—

No. 46.	Four Bunches, two premiums....		$1 00	50

VEGETABLES,—FOUR VARIETIES.—

No. 47. Three specimens each, best kept, gratuities.

Thursday, April 20.

BEGONIA,—IN BLOOM.—

No. 48.	One plant, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.

No. 49.	One stand, three premiums.....	$3 00	2 00	1 00

HORSE RADISH.—

No. 50.	Five Roots, two premiums.....		$1 00	50

PARSNEPS.—

No. 51.	Ten, of the same variety, two premiums.....		$1 00	50

RHUBARB.—

No. 52.	Ten stalks, same variety, two premiums.....		$1 00	50

Thursday, April 27.

PANSIES,—NO DUPLICATES.

No. 53.	One stand, and one spike to a vial, three premiums.....	$3 00	2 00	1 00

APPLES.—

No. 54.	Any variety, three premiums....	$1 50	1 00	50

VEGETABLES.—

No. 55.	Four varieties, three specimens each, three premiums.....	$1 50	1 00	50

Thursday, May 4.

HYACINTHS,—OPEN CULTURE.—

No. 56. Display, three premiums.....$3 00 2 00 1 00

POT PLANTS,—IN BLOOM.

No. 57. Gratuities, if merited.

CUCUMBERS.—

No. 58. Two,—two premiums..... $1 00 50

LETTUCE.—

No. 59. Four heads, two premiums..... $1 00 50

RUTA-BAGA.—

No. 60. One peck, two premiums..... $1 00 50

Thursday, May 11.

TULIPS,—OPEN CULTURE.—

No. 61. Display, three premiums.....$3 00 2 00 1 00

BOUQUET (HAND).

No. 62. To be seven inches in diameter, exclusive of foliage, or green, three premiums $3 00 2 00 1 00

ASPARAGUS.—

No. 63. Two bunches, of twelve stocks each, three premiums.....$1 50 1 00 50

DANDELIONS.—

No. 64. One peck of (cultivated), two premiums $1 00 50

Thursday, May 18.

BULBS,—(HARDY),—OPEN CULTURE.

No. 65. Display, three premiums..... ..$3 00 2 00 1 00

BASKET,—ON STAND.—

No. 66. Ten inch oval handle, three premiums $3 00 2 00 1 00

FUCHSIA,—DISTINCT VARIETIES.—

No. 67. Four plants in bloom, three premiums.....$3 00 2 00 1 00

RHUBARB.—

No. 68. Ten stalks, gratuities.

Thursday, May 25.

PELARGONIUM—(FANCY AND SHOW),—IN BLOOM.—

No. 69. Four plants, of distinct varieties, three premiums.....$3 00 2 00 1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 70. Stand, three premiums.....$3 00 2 00 1 00

ASPARAGUS.—

No. 71. Two bunches, of twelve stalks each, gratuities.

Thursday, June 1.

CUT FLOWERS,—(FROM HARDY PLANTS AND SHRUBS).—

No. 72. For the best display, open culture, three premiums.....$3 00 2 00 1 00

RHODODENDRONS.—

No. 73. For the best display, three premiums $3 00 2 00 1 00

AZALEA—(GHENT).

No. 74. For the best display, three premiums $3 00 2 00 1 00

AZALEA—(MOLLIS).

No. 75. For the best display, three premiums $3 00 2 00 1 00

RADISHES.—

No. 76. Twelve, gratuities.

Thursday, June 8.

PÆONIA.—

No. 77.	For the best display, three premiums	$3 00	2 00	1 00

IRIS.—

No. 78.	For the best display, three premiums	$3 00	2 00	1 00

HYDRANGEA,—ONE PLANT, IN BLOOM.—

No. 79.	Hortensis, two premiums		$2 00	1 00
No. 80.	Otaksa, two premiums		2 00	1 00
No. 81.	Thomas Hogg, two premiums		2 00	1 00

FRUIT AND VEGETABLES.—

No. 82. Gratuities for meritorious specimens.

Thursday, June 15.

AQUILEGIA,—IN VARIETY.—

No. 83.	Stand, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—

No. 84.	ONE STAND,—the varieties of any species must not exceed three, three premiums	$3 00	2 00	1 00
No. 85.	ONE VASE,—the specimens not to be tied or wired, two premiums.		2 00	1 00

NATIVE FLOWERS,—NAMED VARIETIES.—

No. 86.	Stand, three premiums	$3 00	2 00	1 00

STRAWBERRIES.—

No. 87.	Crystal City, one quart, three premiums	$1 50	1 00	50
No. 88.	Durand's Pioneer, one quart, three premiums	1 50	1 00	50
No. 89.	Downer's Prolific, one quart, three premiums	1 50	1 00	50

VEGETABLES,—

No. 90.	Beets (Early), twelve specimens, two premiums		1 00	50

Thursday, June 22.

ROSES,—[To be shown in the boxes of the Society].—

No. 91.	For the best twelve blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums	$4 00	3 00	2 00
No. 92.	For the best six blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums	3 00	2 00	1 00
No. 93.	For the best stand of named Roses, three premiums	5 00	3 00	2 00
No. 94.	For the best Basket or Dish of Roses, two premiums		2 00	1 00

DIANTHUS BARBATUS—(Sweet William).—

No. 95.	Stand, three premiums	$3 00	2 00	1 00

STRAWBERRIES.—

No. 96.	Charles Downing, one quart, three premiums	$1 50	1 00	50
No. 97.	Col. Cheney, one quart, three premiums	1 50	1 00	50
No. 98.	Crescent, one quart, three premiums	1 50	1 00	50
No. 99.	Cumberland Triumph, one quart, three premiums	1 50	1 00	50
No. 100.	Monarch of the West, one quart, three premiums	1 50	1 00	50
No. 101.	Sharpless, one quart, three premiums	1 50	1 00	50
No. 102.	Wilder, one quart, three premiums	1 50	1 00	50
No. 103.	Wilson, one quart, three premiums	1 50	1 00	50
No. 104.	Any variety, fifty berries (flat), gratuities.			

VEGETABLES.—

No. 105.	Peas, one peck, two premiums...	$1 00		50

Thursday, June 29.

BOUQUET—(PARLOR).—

No. 106.	Pair, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 107.	Stand, three premiums.	$3 00	2 00	1 00
No. 108.	Basket (oval, flat, twelve inches), three premiums.....	3 00	2 00	1 00

STRAWBERRIES.—

No. 109.	Bidwell, one quart, three premiums.....	$1 50	1 00	50
No. 110.	Glendale, one quart, three premiums.....	1 50	1 00	50
No. 111.	Jucunda, one quart, three premiums.....	1 50	1 00	50
No. 112.	Lincoln, one quart, three premiums.....	1 50	1 00	50
No. 113.	Manchester, one quart, three premiums.....	1 50	1 00	50
No. 114.	Miner's Great Prolific, one quart, three premiums.....	1 50	1 00	50
No. 115.	Triomphe de Gand, one quart, three premiums.....	1 50	1 00	50
No. 116.	Any other variety, one quart, gratuities.			
No. 117.	Any variety, fifty berries (flat), gratuities.			

VEGETABLES.—

No. 118. Peas, one peck, gratuities.

Thursday, July 6.

CLEMATIS,—DISPLAY.—

No. 119.	Of not less than six named varieties, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS.—

No. 120.	For the best arranged stand, without restriction as to foliage, varieties, or quantity of flowers, three premiums	$3 00	2 00	1 00

HARDY FLOWERS.—

No. 121.	For the best stand, three premiums	$3 00	2 00	1 00

RASPBERRIES (RED).—

No. 122.	Brandywine, two quarts, three premiums	$1 50	1 00	50

BLACKCAPS.—

No. 123.	Davison's Thornless, two quarts, three premiums	$1 50	1 00	50
No. 124.	Doolittle, two quarts, three premiums	1 50	1 00	50

CHERRIES.—

No. 125.	Any variety, two quarts, three premiums	$1 50	1 00	50

CURRANTS.—

No. 126.	Red Dutch, two quarts, three premiums	$1 50	1 00	50
No. 127.	White Grape, two quarts, three premiums	1 50	1 00	50
No. 128.	Any other variety, two quarts, three premiums	1 50	1 00	50

STRAWBERRIES.—

No. 129.	Any variety, two quarts, gratuities.			

VEGETABLES.—

No. 130.	Beans, (Snap), one peck, two premiums		$1 00	50
No. 131.	Peas, any variety, one peck, two premiums		1 00	50

TOMATOES.—

No. 132.	Twelve specimens, two premiums.		$1 00	50

Thursday, July 13.

HOLLYHOCKS.—

No. 133.	For the best twelve, distinct colors, three premiums	$2 00	1 00	50
No. 134.	For the best six, distinct colors, two premiums		1 00	50

ZONALE GERANIUMS.—

No. 135.	For the best stand, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—

No. 136.	For the best stand, of 24 named varieties, three premiums	$3 00	2 00	1 00

CURRANTS.—

No. 137.	La Versaillaise, two quarts, three premiums	$1 50	1 00	50
No. 138.	Red Dutch, two quarts, three premiums	1 50	1 00	50
No. 139.	White Grape, two quarts, three premiums	1 50	1 00	50
No. 140.	Any other variety, two quarts, gratuities.			

STRAWBERRIES.—

No. 141. Any variety, one quart, gratuities.

RASPBERRIES.—

No. 142.	Brincklé's Orange, two quarts, three premiums	$1 50	1 00	50
No. 143.	Northumberland, two quarts, three premiums	1 50	1 00	50
No. 144.	Hudson River Antwerp, two quarts, three premiums	1 50	1 00	50
No. 145.	Clarke, two quarts, three premiums	1 50	1 00	50
No. 146.	Franconia, two quarts, three premiums	1 50	1 00	50
No. 147.	Hornét, two quarts, three premiums	1 50	1 00	50
No. 148.	Turner, two quarts, three premiums	1 50	1 00	50

No. 149.	Cuthbert, two quarts, three premiums	1 50	1 00	50
No. 150.	Herstine, two quarts, three premiums	1 50	1 00	50

BLACKCAPS.—

No. 151.	Gregg, two quarts, three premiums	$1 50	1 00	50
No. 152.	Mammoth Cluster, two quarts, three premiums	1 50	1 00	50

VEGETABLES.—

No. 153.	Beets, twelve Egyptian turnip-rooted, two premiums		$1 00	50
No. 154.	Potatoes, one peck, two premiums		1 00	50
No. 155.	Peas, one peck, gratuities.			

Thursday, July 20.

SALPIGLOSSIS.—

No. 156.	Not less than one-half stand, two premiums		$2 00	1 00

GERMAN STOCKS.—

No. 157.	Not less than one-half stand, two premiums		$2 00	1 00

GLOXINIA,—IN POTS.—

No. 158.	Six varieties in bloom, three premiums	$3 00	2 00	1 00

LILIUM.—

No. 159.	Vase, two premiums		$2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 160.	Stand, three premiums	$3 00	2 00	1 00

RASPBERRIES.—

No. 161. Any variety, two quarts, gratuities.

BLACKBERRIES.—

No. 162.	Kittatinny, two quarts, three premiums	$1 50	1 00	50

No. 163.	Snyder, two quarts, three premiums	1 50	1 00	50
No. 164.	Wachusett, two quarts, three premiums	1 50	1 00	50
No. 165.	Any other variety, gratuities.			

VEGETABLES.—

POTATOES.—

No. 166.	Beauty of Hebron, one peck, two premiums		$1 00	50
No. 167.	Early Rose, one peck, two premiums		1 00	50

Thursday, July 27.

FLOWERS,—SEEDLINGS OF 1882.—

No. 168.	Stand, three premiums	$3 00	2 00	1 00

BASKET.—

No. 169.	Round, flat, twelve inch, three premiums	$3 00	2 00	1 00

PETUNIAS.—

No. 170.	Stand, three premiums	$3 00	2 00	1 00

PEARS.—

No. 171.	Doyenné d'Eté, twelve, three premiums	$1 50	1 00	50

VEGETABLES.—

No. 172.	Squash, four Summer Crook-neck, two premiums		$1 00	50

TOMATOES.—

No. 173.	Twelve, of any variety, two premiums		$1 00	50

Thursday, August 3.

CUT FLOWERS,—GROWN FROM SEED.—

No. 174.	Stand of distinct varieties, three premiums	$3 00	2 00	1 00

BOUQUET,—PYRAMID.—

No. 175.	Twelve inches from base to tip, three premiums	$3 00	2 00	1 00

PHLOX DRUMMONDI.—

No. 176.	Stand of best varieties, three premiums	$3 00	2 00	1 00

APPLES.—

No. 177.	Any variety, twelve, gratuities.			

PEARS.—

No. 178.	Beurre Giffard, twelve, two premiums		$1 50	1 00

VEGETABLES.—

No. 179.	Cabbages, any variety, three, two premiums		$1 00	50
No. 180.	Corn (Sweet), twelve ears, two premiums		1 00	50

Thursday, August 10.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 181.	Twenty blooms, or clusters, two premiums		$2 00	1 00

CUT FLOWERS,—OPEN CULTURE.—

No. 182.	Stand of seedlings of the Spring of 1882, distinct varieties, three premiums	$3 00	2 00	1 00

GLADIOLUS.—

No. 183.	Eighteen named varieties, one spike each, three premiums	$3 00	2 00	1 00

VERBENAS.—

No. 184.	Stand, best varieties, three premiums	$3 00	2 00	1 00

APPLES.—

No. 185.	Astrachan (Red), twelve, three premiums	$1 50	1 00	50

PEARS.—

No. 186.	Beurre Giffard, twelve, two premiums		1 50	1 00

GOOSEBERRIES.—

No. 187.	Downing's Seedling, one quart, two premiums		$1 00	50
No. 188.	Any other variety, one quart, two premiums		1 00	50

VEGETABLES.—

No. 189.	Corn (Sweet), twelve ears of one variety, two premiums		$1 00	50
No. 190.	Potatoes, Mammoth Pearl, one peck, two premiums		1 00	50
No. 191.	Potatoes, Extra Early Ohio, two premiums		1 00	50
No. 192.	Squashes, Marrow, or Turban, four, two premiums		1 00	50

Thursday, August 17.

ANTIRRHINUM.—

No. 193.	Stand, best varieties, three premiums	$3 00	2 00	1 00

LILIUM.—

No. 194.	Six varieties, three premiums	$3 00	2 00	1 00

PINKS.—ALL KINDS.—

No. 195.	Stand, three premiums	$3 00	2 00	1 00

APPLES.—

No. 196.	Astrachan (Red), twelve, three premiums	$1 50	1 00	50
No. 197.	Early Harvest, twelve, three premiums	1 50	1 00	50

PEARS.—

No. 198.	Beurré de l'Assomption, twelve, three premiums	$1 50	1 00	50
No. 199.	Clapp's Favorite, twelve, three premiums	1 50	1 00	50
No. 200.	Dearborn's Seedling, twelve, three premiums	1 50	1 00	50

PEACHES.—

No. 201.	Alexander, twelve, three premiums	$1 50	1 00	50
No. 202.	Beatrice, twelve, three premiums	1 50	1 00	50

VEGETABLES.—

No. 203.	Potatoes, any variety, one peck, two premiums		$1 00	50
No. 204.	Tomatoes, Acme, twelve, two premiums		1 00	50
No. 205.	Livingston's Perfection, twelve, two premiums		1 00	50

Thursday, August 24.

ASTERS.—

No. 206.	Rose, eighteen, two premiums		$1 00	50
No. 207.	Hedgehog, eighteen, two premiums		1 00	50
No. 208.	Diamond, eighteen, two premiums.		1 00	50
No. 209.	Victoria, eighteen, two premiums.		1 00	50
No. 210.	Boltzés, must be shown in the whole plant, two premiums		2 00	1 00

ASTERS,—(Pompon.)—

No. 211.	Stand, three in a bottle, three premiums	$3 00	2 00	1 00

GLADIOLUS,—(distinct varieties.)—

No. 212.	Eighteen, 1 spike each, three premiums	$4 00	3 00	2 00

DAHLIAS,—(named varieties.)—

No. 213.	Stand, three premiums	$3 00	2 00	1 00

APPLES.—

No. 214.	Sweet Bough, twelve, three premiums	$1 50	1 00	50
No. 215.	Duchess of Oldenburg, twelve, three premiums	1 50	1 00	50

PEARS.—

No. 216.	Clapp's Favorite, twelve, three premiums	$1 50	1 00	50

No. 217.	Rostiezer, twelve, three premiums.	1 50	1 00	50
No. 218.	Tyson, twelve, three premiums...	1 50	1 00	50

PEACHES.—

No. 219.	Hale, (Early), twelve, three premiums.....	$1 50	1 00	50
No. 220.	Rivers, (Early), twelve, three premiums.....	1 50	1 00	50

PLUMS.—

No. 221.	Any variety, twelve, two premiums.....		$1 00	50

Thursday, August 31.

CUT FLOWERS,—(DISTINCT VARIETIES.)—

No. 222.	Stand, three premiums.....	$3 00	2 00	1 00

DELPHINIUM.—

No. 223.	Stand, best varieties, three premiums.....	$3 00	2 00	1 00

GERANIUMS,—(DISTINCT VARIETIES.)—

No. 224.	Stand, three premiums.....	$3 00	2 00	1 00

GLADIOLUS,—NO DUPLICATES.—

No. 225.	Display, three premiums.....	$3 00	2 00	1 00

SWEET PEA.—

No. 226.	One stand, best variety, not more than six flowers in one bottle, three premiums.....	$3 00	2 00	1 00

APPLES.—

No. 227.	Williams's Red, twelve, two premiums.....		$1 00	50

PEARS.—

No. 228.	Clapp's Favorite, twelve, two premiums.....		$1 50	1 00
No. 229.	Souvenir du Congrés, twelve, two premiums.....		$1 50	1 00
No. 230.	Any other variety, twelve, gratuities.			

PEACHES.—

No. 231.	Cooledge, twelve, two premiums.	$1 00	50
No. 232.	George Fourth, twelve, two premiums	1 00	50

PLUMS.—

No. 233.	Bradshaw, twelve, two premiums.	$1 00	50
No. 234.	General Haud, twelve, two premiums	1 00	50
No. 235.	Imperial Gage, twelve, two premiums	1 00	50
No. 236.	Jefferson, twelve, two premiums.	1 00	50
No. 237.	Lombard, twelve, two premiums.	1 00	50
No. 238.	Washington, twelve, two premiums	1 00	50

VEGETABLES.—

No. 239.	Beans.—Large Lima (shelled), one quart, two premiums.....	$1 00	50
No. 240.	Horticultural (in the pod), one-half peck, two premiums.....	1 00	50

Thursday, September 7.

BALSAM,—Grown in Pots.—

No. 241.	Six plants in bloom, three premiums	$3 00	2 00	1 00

LILIUM JAPONICUM.—

No. 242.	Best display, three premiums...	$3 00	2 00	1 00

PHLOX—Perennial.—

No. 243.	Stand, three premiums.....	$3 00	2 00	1 00

SCABIOSA.—

No. 244.	Stand, best variety, three premiums	$3 00	2 00	1 00

ZINNIA.—

No. 245.	Stand, at least twelve varieties, two premiums.....	$2 00	1 00

APPLES.—

No. 246.	Williams's Red, twelve, two premiums		$1 00	50
No. 247.	Sweet Bough, two premiums		1 00	50
No. 248.	Worcester Spy, two premiums		1 00	50

APPLES—(CRAB).—

No. 249.	Transcendent, 24, three premiums	$1 50	1 00	50

PEARS.—

No. 250.	Ansault, twelve, three premiums	$1 50	1 00	50
No. 251.	Bartlett, three premiums	1 50	1 00	50
No. 252.	Belle Lucrative, three premiums	1 50	1 00	50
No. 253.	Earle's Bergamot, three premiums	1 50	1 00	50
No. 254.	St. Ghislain, three premiums	1 50	1 00	50

PEACHES.—

No. 255.	Crawford (Early), twelve, two premiums		$1 00	50
No. 256.	Foster, two premiums		1 00	50

VEGETABLES.—

No. 257. Four varieties, gratuities.

Thursday, September 14.

BOUQUET—(PARLOR).—

No. 258.	Best, loosely arranged, three premiums	$3 00	2 00	1 00

DAHLIA.—

No. 259.	Stand, best variety, three premiums	$3 00	2 00	1 00

NASTURTIUM AND TROPŒOLUM—(Stand).—

No. 260.	Best varieties, not more than six blooms in each bottle, three premiums	$3 00	2 00	1 00

APPLES.—

No. 261.	Foundling, twelve, two premiums.			$1 00	50
No. 262.	Golden Sweet, two premiums....			1 00	50
No. 263.	Gravenstein, four premiums..	2 00	1 50	1 00	50

PEARS.—

No. 264.	Bartlett, twelve, four premiums.	$2 00	1 50	1 00	50

PEACHES.—

No. 265.	Crawford (Early), twelve, two premiums			$1 00	50
No. 266.	Oldmixon, two premiums.....			1 00	50

MELONS.—

No. 267.	Green-Flesh, three, two premiums			$1 00	50
No. 268.	Watermelons (2), two premiums..			1 00	50

Thursday, September 21.

BASKET—Cut Flowers.—

No. 269.	Best, 12 inch handle, on stand, three premiums.....	$3 00		2 00	1 00

NATIVE FLOWERS,—named varieties.—

No. 270.	Stand, three premiums.....	$3 00		2 00	1 00

PANSIES,—with Foliage.—

No. 271.	Stand, three spikes in each bottle, three premiums.....	$3 00		2 00	1 00

FLOWERS AND FRUIT.—

No. 272.	Combination, three premiums...	$3 00		2 00	1 00

APPLES.—

No. 273.	Codlin (Dutch), twelve, two premiums			$1 50	1 00
No. 274.	Porter, three premiums.....		1 50	1 00	50
No. 275.	Pumpkin Sweet, two premiums..			1 50	1 00

APPLES—(CRAB).—

No. 276.	Hyslop, 24, two premiums.....		$1 00	50

PEARS.—

No. 277.	Doyenné Boussoc, twelve, two premiums.....		$1 00	50
No. 278.	Durandeau, three premiums.....	1 50	1 00	50
No. 279.	Merriam, two premiums		1 00	50
No. 280.	Paradis d'Automne, three premiums.....	1 50	1 00	50
No. 281.	Seckel, three premiums.....	1 50	1 00	50
No. 282.	Washington, two premiums.....		1 00	50

GRAPES.—

No. 283.	Moore (Early), three clusters, two premiums		$1 00	50
No. 284.	Lady, three clusters, two premiums		1 00	50
No. 285.	Prentiss, three clusters, two premiums		1 00	50
No. 286.	Worden, three clusters, two premiums		1 00	50
No. 287.	Brighton, three clusters, two premiums		1 00	50

PEACHES.—

No. 288.	Crawford (Late), twelve, two premiums		$1 00	50
No. 289.	Stump the World, two premiums.		1 00	50
No. 290.	Any other variety, two premiums.....		1 00	50
No. 291.	New Seedling,—originated in Worcester County, three premiums	1 50	1 00	50

Thursday, September 28.

ASTERS.—

No. 292.	Stand, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 293.	Twenty blooms or clusters, three premiums.	$3 00	2 00	1 00

CUT FLOWERS—STAND.—

No. 294.	Three premiums	$3 00	2 00	1 00

APPLES.—

No. 295.	Holden Pippin, twelve, three premiums	$1 50	1 00	50
No. 296.	Lyscom, three premiums	1 50	1 00	50
No. 297.	Twenty Ounce, three premiums	1 50	1 00	50

PEARS.—

No. 298.	Beurré Hardy, twelve, three premiums	$1 50	1 00	50
No. 299.	Beurré Superfin, three premiums	1 50	1 00	50
No. 300.	Louise Bonne de Jersey, three premiums	1 50	1 00	50
No. 301.	Seckel, three premiums	1 50	1 00	50
No. 302.	St. Michel Archange, two premiums		1 00	50
No. 303.	Washington, two premiums		1 00	50

PEACHES.—

No. 304. Any variety, twelve, gratuities.

GRAPES.—

No. 305.	Concord, three clusters, two premiums		$1 00	50
No. 306.	Delaware, two premiums		1 00	50
No. 307.	Duchesse, two premiums		1 00	50
No. 308.	Pocklington, two premiums		1 00	50

VEGETABLES.—

No. 309.	Cauliflowers, three, two premiums		$1 50	1 00
No. 310.	Four varieties, three premiums	1 50	1 00	50

Thursday, October 5.

BASKET—(Cut Flowers).—

No. 311.	Twelve inch flat, oval, three premiums	$3 00	2 00	1 00

STAND—(CUT FLOWERS).—

No. 312.	Three premiums	$3 00	2 00	1 00

APPLES.—

No. 313.	Garden Royal, twelve, two premiums		$1 00	50
No. 314.	Maiden's Blush, two premiums		1 00	50
No. 315.	Washington Strawberry, two premiums		1 00	50
No. 316.	Any other variety, gratuities.			

PEARS.—

No. 317.	Beurré Bosc, twelve, four premiums	$2 00	1 50	1 00	50
No. 318.	Beurré Clairgeau, two premiums			1 00	50
No. 319.	Dr. Reeder, three premiums		1 50	1 00	50
No. 320.	Sheldon, four premiums	2 00	1 50	1 00	50
No. 321.	Any other variety, gratuities.				

GRAPES,—OPEN CULTURE.—

No. 322. Any variety, three clusters, gratuities.

QUINCES.—

No. 323.	Champion, twelve, three premiums	$1 50		1 00	50
No. 324.	Orange, twelve, three premiums		1 50	1 00	50

VEGETABLES.—

No. 325.	Potatoes.—Six varieties (named), ½ peck each, three premiums	$2 00		1 50	1 00
No. 326.	Squashes (Winter).—Four, three premiums		1 50	1 00	50

Thursday, October 12.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 327.	Stand, three premiums	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 328.	Combination, three premiums	$3 00	2 00	1 00

APPLES.—

No. 329.	Any variety named, three premiums	$1 50	1 00	50

PEARS.—

No. 330.	Dix, twelve, three premiums	$1 50	1 00	50
No. 331.	Duchesse, three premiums	1 50	1 00	50
No. 332.	Marie Louise, three premiums	1 50	1 00	50
No. 333.	Onondaga, three premiums	1 50	1 00	50

GRAPES,—OPEN CULTURE.—

No. 334.	Any variety, three clusters, three premiums	$1 50	1 00	50

QUINCES.—

No. 335.	Any variety (named), twelve, three premiums	$3 00	2 00	1 00

Thursday, October 19.

CUT FLOWERS.—(BOUQUET).—

No. 336.	Style, flat, mantle, size not to exceed twelve inches from base to tip, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—(STAND).

No. 337.	Three premiums	$3 00	2 00	1 00

APPLES.—

No. 338.	McClellan, twelve, two premiums		$1 00	50
No. 339.	Mother, two premiums		1 00	50
No. 340.	Sutton Beauty, two premiums		1 00	50
No. 341.	Any other variety (named), two premiums		1 00	50

PEARS.—

No. 342.	Beurré d'Anjou, twelve, four premiums	$2 00 1 50	1 00	50
No. 343.	Beurré Diel, two premiums		1 00	50

No. 344.	Doyenné du Comice, four premiums	2 00	1 50	1 00	50
No. 345.	Urbaniste, three premiums		1 50	1 00	50

VEGETABLES.—

No. 346.	Four varieties, two premiums			$1 00	50

Thursday, October 26.

CHRYSANTHEMUM.—

No. 347.	Stand, three premiums	$3 00		2 00	1 00
No. 348.	Six plants in bloom, three premiums		3 00	2 00	1 00

FERN—(Parlor).—

No. 349.	Best plant, three premiums	$2 00		1 00	50

PALM—(Parlor).—

No. 350.	Limited to two feet in height, three premiums	$2 00		1 00	50

GARDEN—(Window).

No. 351.	Three premiums	$4 00		3 00	2 00

APPLES.—

No. 352.	Any variety (named), three premiums	$1 50		1 00	50

PEARS.—

No. 353.	Beurré Langelier, three premiums	$1 50		1 00	50
No. 354.	Dana's Hovey, two premiums			1 00	50
No. 355.	Glout Morceau, three premiums		1 50	1 00	50
No. 356.	Josephine de Malines, three premiums		1 50	1 00	50
No. 357.	Lawrence, three premiums		1 50	1 00	50
No. 358.	Mount Vernon, two premiums			1 00	50
No. 359.	Winter Nelis, four premiums	2 00	1 50	1 00	50

VEGETABLES.—

No. 360.	Five varieties, three premiums	2 00		1 00	50
No. 361.	Celery.—Five roots, two premiums			1 00	50

TRANSACTIONS

OF THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR, 1882.

COMPRISING

THE

ANNUAL REPORTS OF THE SECRETARY,

AND OF THE

LIBRARIAN.

Worcester:
PRESS OF CHAS. HAMILTON,
No. 311 Main Street.
1883.

NOTE.

The Schedule of Premiums for A. D. 1883, being of more immediate interest to the members of the Society, the Committee on Publication would have given it precedence. But concession had to be made to the professional judgment of the printer, who insisted that the actual priority of 1882 ought not to be lightly set aside.

Care has been taken in the binding, so that those who wish may separate the Reports from the Schedule.

E. W. L.

WORCESTER COUNTY
HORTICULTURAL SOCIETY.
A. D. 1882.

ANNUAL REPORT OF THE SECRETARY.

Anno Domini 1842, the WORCESTER COUNTY HORTICULTURAL SOCIETY received and accepted its Act of Incorporation from the Great and General Court. The *Charter* was conferred upon the townsmen and gownmen of Worcester. The mechanic and yeoman co-operated in a generous rivalry; and the community at large, with rare perception of its opportunity, afforded an essential support.

"A charge to keep, I have;"

warble the melodious hirelings of the Sects. Forty years have elapsed and a *Trust* survives; without other wage for its faithful performance than the consciousness that you have discharged a duty, voluntarily assumed, and gratuitously rendered. A generation has passed away; but few of our early founders and benefactors remaining, to be cheered by our grateful recognition of their disinterested and invaluable services to the cause of Horticulture; and I am privileged to salute you here, today, not as devotees of this or that creed; not as affiliated with the partisan divisions of the hour; not as middle-men or Grangers; nor even as Sovereigns of Industry or Slaves of the Lamp;—but proudly, if simply, as Members of

THE WORCESTER COUNTY HORTICULTURAL SOCIETY!

While England was fairly revelling in a climate like that of the fabled Atlantis, we, upon this side of the ocean, struggled to

maintain heart, with the wind blowing a gale and the mercury indicating 19° below zero. All through the Perfidious Isle,—an exception in six or eight years,—the temperature was that of an unbroken spring; the face of Nature was wreathed in continual smiles; and vegetation, like fruition, progressed without perceptible check. Yet British orchards have failed to yield of their increase; and Autumnal Fruits are an utter disappointment.

Here,—the cold was so intense that the trunks of cherry-trees were riven apart, as in the historical winter of A. D. 1860-61; and the tough canes of the Grape, when not split open, were killed even with the ground. Not a Peach was placed upon our tables, A. D. 1882, originated or grown in Worcester County. Still the fatality was by no means so complete, or irremediable throughout this city and county, as it was twelve years ago. The crop of Pears has been fair, at least, since the setting in of Fall rains: and Apples, such as they may prove, are likely to be in supply sufficient to satiate the foreign market, and destroy the good name of American Fruit; justly estimating the abuses to which that name will be made subservient.

Under such directly opposite conditions, wherein man has been powerless for direction or control, what becomes of the theories that were, heretofore, adequate to account, indiscriminately, for dearth or plenty! In England,—a dream of Arcadia, with scarcely an apple for the Nymphs and Satyrs! In Massachusetts,—blizzards from the North Pole, following closely upon a frost of such severity, and therefore so premature, as to challenge the oldest memory; and thereafter an intense and protracted drought. Yet all crowned by an Orchard Harvest, if not so excessive as usual, in the even year; at worst, large enough; and which it would be better for both orchard and owner were it smaller still.

Hopes have been cherished, that the demand upon the trees would be so much reduced as to re-inforce them in their effort to bear, in 1883. Instances are frequent, in which some special cause has prevented, or blighted, fecundity in the even year; to be succeeded during the next and odd twelvemonth, by a profusion of bloom and fruit. That we are therefrom authorized to deduce a rule, is not so clear; although the hopes, above

mentioned, may be warranted. The Fruit crop of 1883, will be of interest, as well because of its intrinsic value, as from the light, however dim, which may be reflected upon a matter now veiled in dense obscurity. The gain would be incalculable, could we but discover some method of equalizing the harvests; diffusing or dispersing them, so to speak, that all might be years of plenty and not as at present, the alternative of glut or destitution.

Throughout such a season were your Weekly Exhibitions continued, without interruption; until their recent termination at the close of the official year. It would be idle to deny, were it worth the while, that they have been somewhat unfavorably affected by the abnormal weather. The extreme frosts, borne upon piercing winds; and the lack of snow, when most required for a protection; were fatal to many flourishing plantations of Strawberries, whereof a great many were wholly winter-killed. To those who may urge that reliance should not be placed in snow, for any such safeguard; the reply is apt that, when artificial covering is employed, the super-position of a heavy snow is sure to smother. Either method of precaution may be wise; the chances will have to be taken, whichever is selected. What plants did survive, aided by propitious and timely rains, were healthy and prolific. Drought supervened to cut short the yield that, commencing late, would otherwise have been unusually protracted.

To that cause was due the almost total failure of the Raspberry. Many varieties, solicited in your schedule, were not shown at all: some, possibly, because going out of cultivation with or without reason; but the most from the arid fact that their berries had dried upon the canes. Of Brincklé's Orange, that never before failed the writer, he was unable to gather a pint in all the summer. From Hornét and Northumberland, he got a scant quarter of their ordinary crop. Other and more extensive cultivators were scarcely more fortunate: serious losses being thus occasioned to those who might reasonably anticipate a fair return from their investment and labor.

The display of Currants, upon our tables, was unusually fine. But it began and ended there. As the fruit was forming, rains

were almost continuous; rendering the application of Hellebore useless, if not impracticable. The necessary consequence being that the currant-worm *(Abraxis grossulariata)*, had abundant opportunity to put in his noxious work. Why people will not take some slight pains to grow the Currant, and they need be but slight; why, in consideration of the facility with which it may be produced, and its fecundity under only careless and ordinary cultivation, every family with a rod or two of ground does not devote each inch of space to this, the healthiest of all fruits for children that matures in the very season when their vitality is most seriously attacked; is a puzzle keener than that of the "Mother" who would provide a gymnasium for her over-schooled girls, instead of reducing their hours of attendance upon school! Of Currants,—notably the Versaillaise, there was an ample supply for their especial customers, of the most extreme size and acidity, upon the boards of one or two prominent hucksters. Your Secretary has no hesitation in asserting that Currants can be grown, at a profit, for five cents per quart. Of course that is not meant as a denial of the pleasure experienced upon the receipt of a shilling instead. But the actual and earnest contention is, that the Versaillaise,—preferably the Red Dutch, can be grown and marketed at a price that shall leave no excuse for the summer complaint in the families of the poorest; and which shall at the same time that it bestows the consciousness of a kindly action, tickle agreeably the pocket nerve.

When your Secretary first explored Apricot street in search of the Blackberries which our associate (who so rarely sees the silver lining to a cloud), grows in such abundance; the heat was oppressive; the dust suffocating; and the tantalizing drops that were precipitated, in slow distillation, from the threatening clouds all around the horizon,—a delusion and snare. At that date, there was no discouragement: the injunction was to expect the Snyder in a week and the Wachusett in its own good time. The Snyder and Wachusett both came, in excellent condition, upon their appointed days. What the hill-side, or a clean, strong, virgin soil upon a sunny slope, may have done to invigorate, or secure, is a problem that the writer cannot solve with the facts at his command. He feels well assured, however, that the crop

held out better than the market price; and that the early sale to the horticulturist was more encouraging than the later sacrifice to the huckster.

The problem of a Public Market, in a City as large as Worcester has now become, is not of the easiest settlement. It has at least two sides; while, to many, it presents itself—polygonal. Yet its advantages are more evident to the writer, with each recurring year. And he doubts not, were one established in some capacious and central location, that the producers and consumers of Worcester County might find a common ground, whereon to meet and traffic to their mutual benefit.

The Summer season has not been propitious for the growth and maturation of fruit. How then shall we be able to add anything to the sum of existing knowledge concerning such varieties as are newer, or but lately introduced to your notice. Our veteran associate, Mr. Joseph C. Lovell, of West Boylston; who has kept up with the times more tenaciously than most of us; does not feel that he can deduce trustworthy conclusions after such unwonted climatic experience. He exhibited perhaps a dozen of the recently developed varieties of Pears at the New England Agricultural Fair:* but then the skies had been as brass, and the earth was heated like an oven. Savor, size, or succulence,—there could be none; none at least that would afford a satisfactory test of quality and its probable permanence.

The Francis Dana; and the Student, understood to be one of the Dana Seedlings, cultivated at the Agricultural College in Amherst; were also shown at that Fair by Mr. O. B. Hadwen; so much of whose attention and time are spared to the diffusion of thoroughly accredited, or accepted knowledge, at the various Agricultural Institutes. Your Secretary was subsequently favored with specimens of both those varieties. The Francis Dana filled a vacuum more juvenile than that for which it was intended; but of the Student he can frankly say that it appears to be of good promise. And so little, if not more, he feels can be expected, hereafter, from the College itself. Its degrees will be grades,—thoroughbreds or not!

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*Even their novelty scarcely elicited more than a casual glance from the overworked Committee. E. W. L.

The *Ansault** was exhibited by Mr. Lovell, in his collection at the N. E. Fair, shrunken in size by the drought and quite small. Subsequently, at the date assigned in our schedule, it was shown by the writer: its size and form being then fully developed. While those who tested its quality on the 12th of October ult.; and the epicures of local pomology were of the number; are not prepared to endorse the very strong, almost immoderate, praise by Messrs. Ellwanger & Barry; they will own that they were very agreeably impressed with its general character, finding its flesh juicy, melting, and tempting to a second bite. A continued, general, and thorough trial of this new variety is advised, for those who are not content with such as September already yields; tested as they have been by long and approved experience.

Earle's Bergamot was fruited, in different exposures throughout this City, during the past year. Our Librarian boasts of some very fine specimens, maturing later but he thinks superior to those exhibited by Vice-President Parker, in September ult., and which so deservedly received your first premium. Those select specimens were sent to Charles Downing; of whose request for scions you are elsewhere advised, and whose original impression of the character of this new local variety you will doubtless be pleased to learn. Trace the pen of the ready writer!

"NEWBURGH, N. Y., Oct. 3d, 1882

HENRY L. PARKER, Esq.

Dear Sir:

Your kind letter, and also the box of Earle's Bergamot Pears, were received in due time, and would have been answered at once; but I waited for the pears to ripen.

They are of fair size, handsome, and of very good quality; highly vinous and rich, but a little astringent. It appears to be disposed to rot at the core and soon decays after it is ripe.

Please accept my cordial thanks for the Pears, which I was pleased to get and which were the first I had seen.

Very Respectfully,

CHARLES DOWNING."

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*The name by which it was introduced among Nurserymen, was—*Bonne du Puits d'Ansault.* Messrs. E. & B. have wisely accepted the suggestion looking to brevity, that was advised in his Report, A. D. 1880, by E. W. L.

In answer to a note from your Secretary, Mr. Vellette P. Townsend; to whom we are indebted for the preservation of the novel variety from extinction; responds as follows:—

"QUINSIGAMOND, MASS., Oct. 18, 1882.

Dear Sir:

I have never noticed Earle's Bergamot *rotting at the core*, unless they have been kept some time after they had become mellow; when I think such has been the case.

Yours Truly,

V. P. TOWNSEND.

To Edward W. Lincoln, Esq., Secretary."

The merits appreciated by our learned and Honorary Associate, are all that have been claimed for Earle's Bergamot, in Worcester. Many varieties, of long standing, possess fewer. The astringency noticed may well be deemed inseparable from its half-parentage through the Autumn Bergamot;—the Fondante d'Automne standing sponsor for other traits that may be found to require correction or guidance. Should it continually rot at the core, as Mr. Downing seems to apprehend, it would be a serious fault. We have, however, to put up with that defect in other and longer known varieties,—not therefore discarded; and the reasons for patience, in this case, may turn out sufficient. Mr. Downing observes that it "*decays soon after it is ripe.*" It occurs to your Secretary that this is a matter wherein prevention should be tried. Eat them as soon as they are ripe, and suffer the stomach to settle with posterity.

More seriously, however,—of how many Autumnal Pears can it be stated with truth, that they will not rot at the core! Certainly not of the *Citron des Carmes; (Madeleine);* the *Beurré Giffard*; or that superb ornament and crown of the opening Autumn,—*Clapp's Favorite.* Were the case otherwise, all the laws of Nature would be contradicted, whereby it is provided that speedy decay shall supervene upon maturity, to remove simultaneously the offence and its cause. There are things, not pomological solely, which it is impossible and would be undesirable to keep through hot weather. It is simple common sense, regarded calmly, and with as much thought as you would bestow

upon the fit of a new pair of boots, or the bias in a first party dress.

There can no longer be a reasonable doubt that, in this County at least, the *Grape* is to be surely depended on for a crop. After such a twelvemonth as we have just experienced, little remains in the nature of climatic changes, or extremes, to astonish or work ill. The complaint of our most extensive viticulturists is rather of loss by the Rose-Bug; whose ravages are alike sharply felt along Olean Street or upon the hill-sides of West Boylston. Would that iron-clad insect but "invite his soul to loaf" in some vast wilderness; could some practicable mode of effecting his destruction only be devised; it would be the most unmixed blessing that could be bestowed upon Horticulturists everywhere. But it is almost ludicrous to attempt hand-picking: while, to all external applications, they have a hide as callous as that of a hack politician. What may be considered as settled, however, is, that Grapes will ripen out-doors, in three years out of four, if allowed a half-chance; exacting, at that, less trouble and time for their cultivation than any other fruit that can be named. It is of interest, as it may be useful, to record the fact that the Rogers vine, belonging to your Secretary, heretofore mentioned as covering a Pear-tree, survived the terrible exposure of the last Winter wholly unharmed; when others, comparatively sheltered, were split open by the frost, or killed down to their roots. May it not be that the canes of the Grape, if suffered to vibrate with the winds, will continue as unaffected by the cold as the limbs of the tree to which its tendrils are attached?

Is the list of Grapes, virtually recommended by this Society because placed in its Premium-Schedule; meagre enough at best; creditable to an organization pronounced by Marshall P. Wilder only not the first in the Union? *Brighton*, *Concord*, *Delaware*, *Duchess*, *Lady*, *Moore*, *Prentiss*, *Pocklington*, *Worden!* and, by way of benediction for the congregation as it separates, "*three clusters of any variety*,"—not excepting those bunches from Eschol. Many that are new and untried; some which do not improve upon acquaintance; of the entire list but one—the Delaware,—to which the first rank can be accorded, for a

fecundity almost excessive, a quite general adaptation to our climate, and a quality that is unexcelled. What recognition is bestowed upon the Diana! a native of Massachusetts, of which the old Commonwealth has every reason to be proud? Why should our countenance be averted from the Rogers Hybrids,—almost universal favorites; preferred by every one for his individual consumption; and capable of being grown with no more difficulty than attends the common mob, which possess not even a vulgar fraction of their merits. Is the oidium your dread and objection? Meet, and conquer it! so long as Wall Street does not corner all the sulphur in this world! Let it never be said, with truth, that there could be no place in your schedule; because there was no appreciation by the Society! for the Agawam, or Lindley; the Massassoit, Merrimac, or Wilder. They have won their own way, so far, by reason of intrinsic merit; in despite of early prejudice, later sneers, the contempt of pseudo-science, and interested opposition. Our members,—such as can perceive and acknowledge excellence (and who will take his name from that roll?), grow some, or all, of those Rogers Hybrids, for the solid enjoyment to be derived from them when they mature. As that is as much as can be anticipated or gained, from other fruits;—why should this fine class of Grapes alone be damned with the faintest praise; or dismissed with a shrug of cold shoulder!

Floriculture was the greatest sufferer from the character of the season. It has been a source of constant wonder, each week, as our stands and vases presented such a richly furnished appearance, whence all the flowers could be derived? How there could be such continued profusion, when it seemed as if there ought to be absolute dearth! May your *Secretary* venture the explanation that it can all be accounted for by the love for flowers implanted in our nature; which will not suffer itself to be daunted by obstacles; and conquers difficulties interposed to the growth of the plants that we cherish, so long as those difficulties are not insuperable.

October 5th, A. D. 1881, the cold suddenly became so intense as to destroy utterly, root and branch, all out-door plants. Such an experience was as novel as it was sad: no memory retaining

the faintest trace of a similar universal and complete havoc. At this time of writing, a month later in the current year, many gardens are gay with brilliant foliage; *Geraniums* and *Zinnias* vieing with each other which shall present the brightest display, while huge clumps of the *Hydrangea paniculata* outshine them both. In proportion to our discouragement, a twelvemonth since, has been our subsequent good cheer. Regretting heartily all the individual losses caused by that unparalleled fatality, let us profit by its warning;—so to conduct our operations, keeping them well in hand, as to expose ourselves to the minimum of misfortune, should the worst to which we are liable actually befall us. With such and so much prevision, we should not have but ourselves to blame; the humblest pie that can be eaten!

The system of Weekly Exhibitions, whether of Flower or Fruit, appears to be universally accepted in our Society; and commends itself, the more it is understood, to thoughtful Horticulturists everywhere. A week is not too long to anticipate or predict maturity; should acceleration or delay of some especial exhibit become necessary. A fierce storm or an untimely frost may occur on a Friday—*dies infausta!* and seven days thereafter you will have met and compared notes upon the cause and extent of the common calamity. Whatsoever is good you may know in season: if a week must elapse before a conviction of evil is brought home to you, delay cannot be deemed an unmitigated curse. At those Weekly Exhibitions, you behold flowers and fruits in their freshness and prime. Some day, the "science and practice" of Horticulture will demand that selected varieties of flowers and fruit shall be exhibited for as many weeks in succession as possible, to determine when each fruit matures; how long it continues unimpaired; and what may be its entire duration, without fading or decay. And a fortunate solution of that problem would be worth more to Horticulture, and humanity (if the latter has any claim to consideration), than awards of a hundred dollars to this or that monotonous sequence of stands of Cut Flowers; wherein beauty, form, and fragrance, are alike confused and lost.

Annual Exhibitions, so-called; whereby is intended the aggre-

gation and conglomeration of every thing floriferous or pomological that Noah, were he now afloat, would make a part of his cargo—"for keeps"; are obsolete so far as this Society is concerned. Their size oppresses; their conduct is "too previous"; their results unprofitable otherwise, when not impecunious. What true Horticulturist would willingly behold their like again!

The Floral Display, at the New England Agricultural Fair, while the drought was at its worst, was unexpectedly good. Our own members contributed to a visible and great extent, as has been their invariable custom in past years. There were superior exhibits, also, from some who, although members of our Society, have hitherto refrained from gracing our tables, declining to subject themselves to that criticism somewhat too keen, which breathes through the atmosphere of our Hall,—not always in zephyrs! All such should bear in mind that the storm purifies, if it disturbs, and that stagnation is but the sure precursor of death.

A very fine display of *Gladiolus*, from the Vicks of Rochester, N. Y.; the death of whose father is such a recent and sore loss to Horticulture; merits particular notice. There were excellent specimens of the approved varieties; whose names are not recited here, because it would be repeating the catalogue of all that has been found choicest, and best-deserving cultivation. In addition, were *Bryant*, *Brunette*, *Edwin Booth*, *Henry Clay*, *Holmes*, *Innocence*, *Longfellow*, and *Rainbow;* all which are recent introductions from that celebrated establishment; and of which it is not too much to assert that they are worthy of their origin.

Then, again the proper season for Exhibitions! Grant that a Knox stallion may be in trim to show his paces, or proportions, during early September; it does not follow, even if the parallels of latitude run a pretty even course, that colts from the Vermont Morgan can respond to the judicial bell in a dozen false starts. Haying may be finished in Connecticut, or Massachusetts; when they would be grinding scythes among the pines, or drilling for ensilage, if such furtive allusion is permissible. And so with Fruit and Vegetables. New England may be of limited area, if contrasted with other territorial sections of the Republic. Yet her acres must be measured by degrees, whether of latitude or

longitude: while, for diversity of production, letting alone its excellence for the present, she is not obliged to usurp her position—*primus inter pares.* And still, because of that very diversity, there can scarcely be unity. What is the meat of one man may be the poison of another. *Hale's Early* might come up from Connecticut, as it has in former years; and. with the *Cooledge* and *Foster* in its company, challenge successful rivalry. But, from three States, at least, there could be no response, in Nature; while such as Art might supply would not be tolerated by honest yeomen. On the other hand, at a later date,—the farmsteads of New Hampshire and Maine might fairly revel in the golden glory of a superb harvest. But, at the same time, the Gardens and Orchards, perchance the tillage, along the lower Connecticut and Thames; the Blackstone, and the Charles; would be rolled "together as a scroll," "the leaf falling off from the vine, and the falling fig from the fig-tree." Here the Astrachan and Bartlett were long since out of date; sweet corn, the Lima-Bean, and Tomato, might barely linger; and a clump of Salvia, or a scattering Aster, endure, to attest the wealth of the floriage that once enriched the landscape. To the Northward,—all those genera and species would be in their prime, of exceeding abundance and in pre-eminent quality.

Nevertheless the times and seasons: seed-time and harvest; are nowhere inexorably adapted to each other by Nature: nor can the wit of man fit them to one and the same inevitable groove. Parallels, whether of latitude or longitude, are not simply, nor wholly, metes and bounds for a theoretical space. They actually define limitations, or at least conditions of climate within which Ceres, however inconsolable, must circumscribe her wanderings.

So far as concerns the interests of Horticulture, within the County of Worcester, this Society might be satisfied to let well enough alone. We could continue, as at present, inviting displays of Garden and Orchard products, each successive week, thereby promoting rivalry and developing absolute quality. But if, upon special occasions, other Exhibitions are to be held, under indifferent and somewhat alien auspices; prompted more by a greed for gain than by the nobler motive of advancing local

floriculture and pomology; may it not be worth considering, at least, if our entire duty is discharged by inaction? Whether, in short, our efforts should not be directed in aid of, and in co-operation with, those who would lay broad and deep the foundations of a MASSACHUSETTS TERRÆCULTURAL SOCIETY! to comprehend everything as suitable for its Annual Exhibitions that shall appear to enhance the comfort or afford the sustenance of man.

"Homo sum; humani nihil a me alienum puto."

Terræcultural in name! since room, nor occasion, should be left for cavil that Agriculture, or Horticulture, were not specifically mentioned. No dignity could be compromised by submission to such a primacy; nor would the susceptibilities of existing societies be wounded; consulted as they should be about matters of organization and detail. Massachusetts has never possessed a State Agricultural Society, although deriving great benefit from the existence of a vigilant and well-endowed voluntary association. The Massachusetts Horticultural Society might perhaps, at first thought, object to surrender its Annual Autumnal Exhibitions; although the saving from their relinquishment; partially attended, and inadequately supported as they are; would enable it to extend still wider its usefulness in other fields. Our own Society, having long since found that the game was not worth the candle, is already free to concur in any well-advised and judicious plan to develop and stimulate the cultivation of the earth, to the uttermost perfection whereof it may be found capable.

Much that precedes goes upon the assumption that Worcester will be found the most suitable location for Annual Exhibitions by the proposed Society. But yet, one change would be inevitable. The present Agricultural Park is thoroughly equipped with the necessary sheds for animals; and its area was just proved sufficiently capacious for all the absolute requirements of similar occasions. Yet trials of speed between horses of approved, or anticipated merit, have a conceded fascination; and it is a rule with all successful purveyors for public amusement, or recreation, to get the best. But the best cannot be got to peril life and limb around the sharp curves of a half-mile course. The Society of the Future therefore, whether of Worcester County only, or of the whole State, should betake itself to the Peat Meadow, so-called;

constructing a mile track which would insure speed from its very nature; and arranging its sheds around the gravel upland, now drained naturally; of abundant area, and of sufficiently easy access. To such grounds all would be irresistibly drawn who would go anywhere. Upon such a track, the owners of Maud S. and St. Julien, might be tempted to trust their winged coursers; and no one can doubt, were that trust shown, how strong would prove the attraction. The false start and the scrub-race, gather in, even now, a surprising lot of shekels, under the present feeble dispensation. Let all things become new! and what shall hinder the saints of the latter evangel from raking in the pool?

What the Rink has become, with the recent extensive alterations of the building, and the radical development of the adjacent grounds, is plainly manifest, as it has been widely noticed and acknowledged. Ample room; features of attraction for the multitude, manifold, and various enough for every taste; accessible from all quarters: and of facile egress for the individual or a crowd; it leaves little to be desired in the matter of accommodation and convenience. An Industrial Exhibit could be devised, of artistic and mechanical models; such as Worcester could furnish alone; but in which she should be proud to compete with her thrifty sisters throughout the Commonwealth. The acute genius and cunning hand of Massachusetts might be relied upon to fill up every foot of space.

But what would become of *Flora* and *Pomona?* Our own Hall will welcome them, as is fitting; and herein shall they find hospitality and congenial rest. There should be no separate charge for admission; the aim of the Horticulturist being the perfection of species and the instruction of a people. Inferior specimens being excluded, where quality should be established as the test; room would be in plenty for the displays of average years. And there is no danger of the standard being held too high: rather is the peril ever imminent, from good-natured officials, of tolerating the entry of that which is obviously and essentially defective, in the easy-going assurance that the judges will discern its imperfections.

Were such a Society founded, I think that I do not risk much in pledging your cordial and earnest co operation, whether indi-

vidually, or as an organized association. In these latter days, as of yore, it is not always sufficient to spread the tables and issue invitations to the feast. You must now, also, go out into the highways and lanes and compel them to come in! There are thousands in this very City:—how many more throughout the County and State! whose knowledge and appreciation of Flowers and Fruits is restricted to the very primer of Horticulture; and who, in the tendency townward of every population, bid fair to grow up in total ignorance of the most primitive agriculture and its commonest fauna. The Annual Holiday holds out a bright promise to all such, at the close of a year of monotonous toil. Its charms may be perhaps of the earth,—earthy: but we are not all angels, nor would it pay to masquerade in celestial tulle. As the poet describes his actual Woman,—

> "A creature not too bright, or good
> For human nature's daily food,"

so those who purvey wisely for mortal cravings, and wants, will take heed to supply amusement and relaxation. As it were, injecting instruction insidiously, and in manner and measure as it can best be borne. "All work and no play, makes Jack a dull boy!" Nor is Jonathan an exception. Swings and flying-horses; electric lights and novel fireworks; may be but lures, it is true. Yet they are harmless, only as such; and become downright useful, when they induce the heedless, or ignorant, to bestow so much as a casual glance upon objects of greater merit and of intrinsic excellence.

In the issue of the "*Gardeners' Chronicle*" (London) for Nov. 26, A. D. 1881; referring to those who "are largely planting fruit-trees at the instance of Mr. Gladstone, and of well-stocked nurserymen" (*) a "Victim to Pomona" complains bitterly that they may read "with all the profit they will ever get" his account of last Saturday's (19th) sales in Covent Garden:

			£	s.	d.
7	*Bushels*	Josephine (?) pears	1	7	6
9	"	Glout Morceau "	2	0	6
½	"	late (Gansel's) ("Bergamot"?)	0	3	0
5	"	Glout Morceau (small)	0	10	0
4	"	*Strikes* Knight's Monarch	0	7	0
		Apples.			
1½	Bushels	Ribston Pippin	0	10	0

* "Can such things be"? E. W. L.

He adds that "the sales were not made on commission, nor by auction; but, with long endurance, at his own stand." He "threw away another bushel for every one sold;—for Pears perish rapidly this year."* To "*encourage vegetable growers*," he would say that beautiful cauliflowers are at eight (8) for 6d.

"When the price of fruit was at its best, and I was comparatively young and sanguine, one of our leading nurserymen observed to me:—'Ah, sir! it pays a long way better to grow the trees than the fruit, even when you can get it.' Twenty-five years have I now been a fruit-grower, and in one season only has the produce paid the wages,—let alone manure, repairs, interest on capital," &c., &c.

Have none of you ever heard; may I just hint? uttered, similar complaints? Was that querulous discontent warranted by the actual facts? Towards the close of A. D. 1881, the *American Agriculturist* stated that "there had been a great decline in the price (of Apples) according to their latest advices. Boston Baldwins sold in Liverpool, on the last day of November, at 9s. to 14s., the demand being light, and the fruit arriving in poor condition. At those prices there can be little profit to any one." Commenting upon this, "*The Garden*" (London) replies that "there must have been misinformation. Newtowns have lately been bringing as much as 55s. a barrel, and Baldwins have recently brought as much as 25s. in Liverpool. False and rotten Newtowns have fetched the price they deserved. The quality is poor this year, though there must be a few fair specimens to bring such prices."

Quality! quality! quality! There, in one word, you have the whole secret. Insist upon it, to create confidence: and insist upon it all the more, to retain that trust when it has been bestowed! A foreign demand, once firmly established, will react upon the home market. Not that it is desirable to put the price out of reach of any class of our own people; to whom Fruit should be, what it is far from being now, an article of customary daily diet. But skilful cultivation and conscientious selection can make each specimen worth two cents; and any one

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* Opinions, as to that, upon this side of the Ocean, were widely divergent at that time. E. W. L.

who has ever filled a barrel with Apples can easily compute for himself whence comes that return of 25 shillings sterling. The Orchard should be, and can be made, the most valuable property of the New England farmstead. A property wherefrom a larger and surer profit may be derived, at the least expense of labor and trouble. But this will not be achieved, by going about various business throughout eleven months of the year; expecting to gather a perfect crop, without other toil than that of picking, in the harvest moon. The trees must be tended with vigilance, and generously nurtured; for at one and the same time, they are exhausting the soil and themselves. Above all,—must Insects be fought with relentless purpose. Men set out an Orchard and then consider their work done. They do not anticipate such easy returns when planting corn or potatoes; but cultivate continually, and without grudging the labor, until the field can be laid by, securely. Not until the Orchard is allowed its proper rank; as a means of supplying sustenance, and a chief bread-winner; will the harvest become what it can surely be made. It is true enough that success cannot always be compelled; no matter what may have been the preliminary diligence and precaution. But it is still more certain that Fortune will not intrude upon those who avoid her, or evince indifference to her favors. The desire to possess and enjoy fine specimens is not limited to those who frequent our Exhibitions. Their multitude is as great as the love of fruit is general. And, while not all can buy choice Apples, or Pears; it is beyond dispute, so rapidly has the common taste been educated by this and kindred Societies, that there will soon be no demand at all for fruit that is evidently inferior.

But yet it is common rumor that our lanes and country roads are even now ravaged by what may well be termed Orchard-Scavengers. It is currently reported that buyers are scouring the outlying towns of this County, contracting for any and every thing; indifferent whether it may or not be mature; and reckless of future consequences so long as a present market is in immediate prospect. The veteran pomologists who hear me, know that a nice barrel of Apples cannot be packed in this, the year of abundance, without extreme precaution. You have heard

what return for unscrupulous ventures may be expected, in the statement of "*The Garden*" that "false and rotten Newtowns fetched the price they deserved." The Liverpool and London markets are not peculiar as to that. New York dumps her decaying Strawberries and Peaches into the docks. Worcester lets them severely alone; or charitably supplies them as food for the occasional suckers that evade the dams a-down the Blackstone. In scarcely any trade, so sharply as that in fruit, is it as thoroughly determined that "honesty is the best policy." It is the duty of the members of this Society to advance,—not degrade, Horticulture. It is, as well, their interest; whether they have fruit or flowers to put upon the market, or would become purchasers of either; to frown upon chicanery, expose fraud, and denounce deliberate imposture. This Horticultural Society represents the Pomology of a County that accepts no secondary position, flunkeyism to the contrary, notwithstanding. Here,—were leading varieties originated, that have found wide recognition; and here, if we are true to Nature and our own manhood, will they never lack a complete development or be permitted to degenerate.

In this connection, I make no apology for introducing a letter from our learned associate, Charles Downing, whose every word should be treasured as the apples of the Hesperides:

"NEWBURGH, N. Y., Jan. 9, 1882.

EDWARD W. LINCOLN, Esq.

Dear Sir:

Many thanks for a copy of the Transactions of the Worcester County Horticultural Society for 1881, in which I have been much interested; and I like the departure from the old plan.*

The Hubbardston Nonesuch, to my taste, is the perfection of an apple, containing just sufficient sugar and acid for a first-class eating apple, and also for cooking without sugar. Yet some who are accustomed to condiments, and high-seasoned food, would not think so. The tree is a good grower, good bearer, and the fruit generally fair and handsome. I believe it would make a profitable apple to ship, but think it should be gathered a few days earlier than for home use, or before fully ripe, or the usual time. They should be shipped as soon

*Weekly, instead of large Annual Exhibitions, often without other merit than size. E. W. L.

as they can be got ready and the weather is cool enough. When the English people know its worth it will be in great demand.*

If they could grow this apple in Maine, in as good perfection as we do, it would be a valuable shipping apple to them, because they could ship them a month or so later than you could.

If you have the following varieties, I will be much obliged if you will send me three or four cuttings of each, by mail, viz:— Sterling; Sutton Beauty; Leicester Sweet; Worcester Spy; and Earle's Bergamot Pear.

* * * * * * * *

Very Respectfully,

CHARLES DOWNING."

I know that you will accept my assurance that the request for scions of some of our highly valued local fruits met with a faithful response. They are now sure to be closely watched and subjected to an assiduous scrutiny and test which will go far to determine their general merits.

A radical change was initiated, during the past Horticultural Year, by a re-construction of your *Committees of Award.* "In the multitude of councillors will be found safety!" is the monotone of the parrots who put their mouths in the dust, as they fall down in Tremont street and adore! an *imago*,— "whose feet are of miry clay." "*Ex uno disce omnes!*" exhorts your *Secretary*, recalling the prophets of all time and beholding the disciples, as they "consider the lilies of the field" at the bidding of their Solitary Teacher.

A single expert was designated in each division, whether of Floriculture or Pomology; whose decisions must, necessarily, be unanimous, and were designed to be final. If exception has been taken to their judgment, in any case, it can only be explained by the incompetency of the judges; or because competitors, in their first disappointment, took an appeal to themselves from the authorized decision. This Society has exhausted every known and approved method of apportioning rewards of merit, saving only the cold and bloodless test by a scale of points. It has never yet tried the experiment of allowing each contributor to appraise the comparative rank of his own articles. So long as

*This emphatic commendation of the Hubbardston Nonesuch was doubtless inspired by the suggestion of that Apple in the Report of the Secretary for A. D. 1881, as one that would seem most suitable and desirable for export.

E. W. L.

tastes differ; while humanity continues to be fallible; until selfishness ceases to influence mortal motives and actions; we must do the best that is within our power; "with charity for all, with malice towards none."

There has appeared lately, after much preliminary flourish, a new version of the Christian Bible, wherein great things are ascribed to the power of Love! Your *Secretary* has no reason to go back upon Cupid, or Venus; nor will he now take their names in vain. But to those who are not continually asking,—"Show us some new thing!"—and can rest satisfied with the faith as it was revealed to the Saints, it is known that

"Charity suffereth long and is kind; Charity envieth not: * * doth not behave itself unseemly, seeketh not her own, is not easily provoked, thinketh no evil;

Beareth all things, believeth all things, hopeth all things, endureth all things."

Behold Ideal Horticulture, at its Weekly Exhibitions, as portrayed in plenary inspiration!

In all the races of this world some must lead. Call it one man's luck, or another's misfortune, if you will; it is nevertheless as certain as fate that, where there is an appointed goal, but one can attain it, while his rivals must be left behind. And, in an honorable struggle, it implies nothing discreditable if we achieve only the second place. In any event, we have done our best. He who surpasses us has done no more, although his best happens to excel ours. Can we not emulate the Spartan mother who made this noble reply to those who would poison her mind with "envy, hatred, and malice," because another had been preferred to her son;—"Shall I not rejoice that Sparta has worthier citizens!" Her son had not fallen in her estimation, but! how infinitely rich was the City that had found his superior!

There are some, who abstain from contributing to our Exhibitions because of the ill-nature whose unchecked display is but too painfully manifest. We need the hearty aid and co-operation of all, to "advance the science and promote the practice of Horticulture." We should invite recruits, and cheer on new beginners.

"There is a Reaper, whose name is Death."

His annual harvest has been garnered. It comprehends the loss of your best and wisest. Shall their places remain for ever vacant? The response must come from this audience, and more especially from the community at large. Our ranks have been depleted rapidly during the later years; and, if we would not allow this time-honored and almost historic Society to sink into senility and decrepitude, the ambition of youth must be awakened;—manhood and womanhood alike being challenged to an unselfish emulation. Men placed themselves in training for years, in ancient times and in heathen countries, to obtain a wreath of laurel or a crown of parsley. The victor was hailed with enthusiasm, and all joined in according the due meed of praise to his pre-eminence. Has human nature degenerated; or is Christianity gone to seed; in this Nineteenth Century? "Tempora mutantur:" shall the rest of the proverb justify itself! Hitherto an Apple has been called—*Maiden's Blush.* Shall a future Committee on Nomenclature be constrained to review that appellation and, selecting one more pertinent and adhesive, decide that, after all, it was but a synonym for the old Female Cheek!

Among our other misfortunes, this season, we have been largely exempt from the plague of *Blight.* In an admitted deficiency of crop, it was something not to lose the very Orchard. The cause, or nature, of Blight, as generally recognized, still continues a profound mystery. There are theorists, in plenty; just as you might have found a score eager and quick to explain why cylinder-heads blew off; or the walking-beam came to an equipoise; during late "Republican" caucuses!

Nothing more definite is known concerning it than in the time of Dr. Lindley, whose character was once summed up thus tersely:—"No one ever united exacter knowledge with better power of conveying it in simple, lucid English." And that patriarch of modern scientific and practical Horticulture, among English-speaking races, openly confessed his ignorance:—

"Blight? A blight is a sun-stroke, or a frost-bite; a plague of insects, or of fungi; a paralysis of the roots, a gust of bad air: it is wetness, it is dryness; it is heat, it is cold; it is plethora, it is starvation; in short, it is any thing that disfigures or destroys foliage."

May I not add, to that concise epitome,—and saps life!

The *Glout Morceau* has almost passed into oblivion. The *Belle Lucrative* perhaps can yet be found in an occcasional garden. The *Beurré Superfin* filled two or three plates at our Exhibition of Sept. 28th ult. It may still be impossible to define the precise nature of Blight,—evil as it is, and evil only. But, at the worst, we can profit by the instructions of accredited Revelation, wherein it is declared that

"A good tree cannot bring forth evil fruit, neither can a corrupt tree bring forth good fruit."

"Every tree that bringeth not forth good fruit is hewn down and cast into the fire."

Almost Nineteen Centuries have passed away; Evolution is dominant, and Ensilage rank; Rivers and Harbors are at flood-tide,—the vision of Senator Benton being curiously realized, wherein a stream of "the Hard, Sir!" stems and surmounts the current of the Mississippi; the land of the Pyramids is fore-closed by English Bond-Holders, and Royal Mummies are in the market; but the question still is,—how much more do you know, in the premises, than was presented in the gospel of the original reporter; and the only one known, or ever likely, to be sainted—Matthew?

Our Hall has been shrewdly and profitably managed, when not required for our exclusive use; and great credit is due to the *Janitor* for the revenue that it has been made to yield, and the good condition in which it is left. But there are repairs that cannot be deferred longer; which cannot help being expensive; yet which, made cheaply to avoid outlay, were better not done at all. A new floor is absolutely indispensable, if we would retain those old friends, who have hitherto adhered to us; or attract others who have not yet learned that, all else being equal, there is an incomparable advantage in having to surmount but a single flight of stairs. We cannot afford to let our Hall depreciate. Competition is so keen, now-a-days, that a very slight superiority, or prospect of trifling gain, suffice to decide the election. The *Grange* never comes near us,—Terræculturists as we are, alike: since it can hire cheaper of an Insurance Company. And still

Insurance Companies would think it strange indeed, were Grangers and Horticulturists to refuse their policies because of their unseemly position as Middlemen !—letting Halls for hire. Latterly if a half-dozen men associate themselves for any purpose, it matters not what ;—their first act is to engage a Hall, by underletting which they calculate, and generally contrive, to hold themselves harmless. They pay no tax as a Society : they contribute nothing to the public treasury : but they do impair the ability of others who must depend upon the support of the community to meet their honest engagements.

Nor are we alone : the Massachusetts Horticultural Society has to struggle with similar embarrassments. True,—no Grange withholds its patronage ; since the hard-fisted yeomanry of Suffolk County use but little hayseed in dressing their hair ; and seldom tickle a hog, except just before election. But the noble tribe of We Cannot Dig ! with their congeners,—To Beg We are Ashamed ! know of no method of accepting a livelihood, so easy for one thoroughly and incurably lazy, as this modern piracy of sub-leases.

Yet we do possess the paramount advantage of owning our building, honestly paid for ; and of being able to surrender the second floor, from time to time, to public occupation and enjoyment. If, borne down by the weight of taxation ; unjust, since it singles out Horticulture for the sole object of oppressive discrimination ; there is all the more reason why we should approve ourselves equal to the emergency. Improve our interior; adorn the spacious panels with the expressive features of our departed worthies ; lay down a floor suitable for the utmost exactions of the modern dance ; " hang out our banner upon the outer walls ! " so that he who runs may read our dedication and purposes ; and thereafter we can confidently challenge, and as safely defy competition. All our appointments, however, must be of the best. Our permanent prosperity as a Society depends upon the continuance of a sufficient revenue from our Real Estate. That may be assured ; if we will but recognize the demands of the present hour and anticipate those of the immediate future.

At the annual meeting of your Trustees, it was voted:

"That the *Secretary*, in conjunction with the Finance Committee, be directed to dispose of obsolete or useless property of the Society; and have full power to provide a sufficient supply of plates or dishes for use at Exhibitions."

Under that authorization, it has been found practicable to sell a portion of our dishes and furniture which the Society had outgrown. But it has not been deemed wise; nor was it supposed to be your purpose; to throw away property, whether obsolete or useless. Somewhat has been sold and the proceeds thereof converted into the treasury: what remains will, when realized in cash, by so much diminish the cost of renovation.

In procuring the new set and style of dishes, your Secretary, and Committee were greeted by a courteous proffer from the Horticultural Society of Newton; through Mr. E. W. Wood, so pleasantly known to you; of the gratuitous use of their moulds. Mr. Phelps, of the Committee, who visited the various Potteries around Boston, in person; as from his individual skill, and acquaintance with the business, he ought; and, in fact, was alone competent so to do; discovered deficiencies that rendered it impossible to avail ourselves of that considerate kindness. Mr. Richard Briggs,—the eminent dealer in all such and kindred forms of merchandise,—was luckily possessed of suitable moulds; and a bargain was soon struck with him. An unconscionable time has been consumed, but you have at last got your dishes; and,—at worst, one month of the year was unexpired. They satisfy all but the chronic grumblers; and their ancestors fretted continually because the prevailing winds drove in nothing but manna and quails!

For the significance of the device you must confess indebtedness to Mr. Phelps. His rare knowledge as a numismatologist; with the aid of coins which he was able to produce for patterns; slightly chastened and corrected by the heathen proclivities of your Secretary; combined in that rare cross-fertilization of Ceres and Flora to whom the angel must have appeared in a simultaneous and fructifying dream. Mr. Phelps has accepted a position in the Federal Department of Agriculture. Let us congratulate the Department upon its acquisition of

the services of one whose approved science and applied practice were second to none in this great Pomological County. Let us deplore the fact that the fancied exigencies of Politics degrade the original State so far beneath the supplementary and conditional Republic, that it has become better to be a doorkeeper in a secondary Department than the custodian of the ark of the covenant!

"I have been young, and now am old; yet have I not seen the righteous forsaken, nor his seed begging bread."

But you can see, if you use your eyes, incorporated and endowed Societies usurping exclusive use of the faculties of an expert associate; working, as it were, a willing horse to his death; taking exception to his discharge of duty, however faithful; carping at his decisions, because not enuring to the private benefit of the censor; and, finally,—grudging the minute and miserable compensation that is set apart to defray the loss, and waste, of time honestly devoted to an impartial and upright adjudication.

There is one tendency, in Societies like our own, which grows more and more evident and importunate; but which cannot be too sedulously fended or avoided. It smacks and savors of the shop, so to speak; and, in the presence of an audience like this, it needs not to be proclaimed for the first time, that the footsteps of the seller should succeed, not guide, those of the producer. The shop must sell, to live; and to that end its goods and wares must conform to the laws of demand and supply. The shop asks only,—Will people buy this flower? Can I dispose of this fruit at a profit to myself? What price can these Apples, most likely, be made to fetch? Now all such questions,—howsoever essential to the solution of the bread-and-butter problem,—are not comprised within the mission of Horticulture. The doctors of that, as of any other Science, must take neither scrip nor staff. They must preach their gospel for the very love of it. Not because the salary is snug; not because the congregation is fashionable and wealthy; nor even because the priesthood gives position and prestige: but simply from the ingrained conviction that there is truth to be told and that it

must be spoken at any inconvenience or cost. Chartered, Forty Years ago, "to advance the Science and promote the Practice of Horticulture;" it is your bounden duty to keep inviolate the trust committed to you; to maintain, untarnished, the reputation achieved by your predecessors; and to guard that Science, and Practice, so jealously that their detriment may never be attributed to you.

That primacy of the shop; the predominance of technicality, so to speak; had grown so painfully conspicuous in England, to the manifest injury of the best interests of Floriculture; that "*The Garden*" was compelled to the subjoined deliverance. In reply to Rev. S. Reynolds Hole, President of the National Rose Society, whose contention was that, admitting the charms of Alpine or Scotch Roses, they must concede the superiority of La France, Charles Lefebvre, and Maréchal Niel;—"*The Garden*" asserts that

"The interest of Rose Gardens is, we have reason to know, injured by the exclusive attention paid to Show Roses."

"Apart from single Roses, and such good shrubby roses as R. Brunoni, there are a number of Roses thrown into undeserved neglect owing to the never ending selection for showing purposes. Fortune's Yellow,—excluded from the list of Show-roses sent out by the National Rose Society; and Fortune's Yellow, garlanding one of the pillars in the kitchen garden at Blenheim,—a lovely sight,—explains the case."

"Is not the National Rose Society composed almost wholly of Exhibitors of Roses, or part Exhibitors? If so,—we can scarcely expect them to take so much interest in the Rose in the Garden, and in making our homes and gardens more beautiful by her aid;—though in no way difficult. We love a good Rose as much as any Florist in England; but, in the course of many wanderings in quest of the beautiful in gardens, the fact that the Rose, as a garden plant; its growth in a graceful as well as vigorous manner; and the good effects in the garden landscape; are things unseen, is constantly forced upon us. On the other hand, nearly every garden is spoiled, except from a comic point of view, by roses on broomsticks."

"In short, the loveliest plant that graces this world of flowers is, from a variety of causes, made the ugliest in habit and in its effects."

The precisian errs to the excess of extreme fastidiousness. This, of itself, may work no evil, as a guide for individual conduct: but it can enure only to the injury of a Society that should

develop, not compel, eclecticism. The poultry fancier breeds to a feather,—indifferent to the yield of eggs or the character of the meat. The later Wamba,—son of Witless,—who is "deep in the blood of Coomassie," to cite the current slang of the gamblers in Fancy Stock, exults in such sanguinary pedigree and finds scant merit in any whiter tongue! You have just listened to the censure visited upon the especial Rosarians of England. And still, it is but a little more than a year since a list of 48 Hybrid Perpetual Roses was recommended by the Massachusetts Horticultural Society, wherein the name of the Gen. Jacqueminot might be sought, in vain. Yet where will you find its superior for general cultivation, properly estimating its hardiness, beauty, and fragrance!

Prove all things and hold fast to that which is good. The Wilson *Strawberry* has its merits,—how much so ever they may be denied; not the least being that it can take such good care of itself. The *Williams Bon Chrétien* or *Bartlett;*—that "noble Pear," as Downing terms it; is such a general favorite that not even sneers, nor the cold shoulder, have enabled the Beurré d' Amanlis, or the Doyenné Boussoc to push it aside or supplant it in popular esteem.

But still, veteran Pomologists are reluctant to admit the merits of the Comice, because, forsooth! it does not succeed with themselves; and dispute the possession of any good qualities by the *Washington*, although, in the judgment of Downing, it is "a beautiful American Pear of very excellent quality." Take from the list of Apples, a half-dozen varieties to which no one would except, and what name can you propose that will not be, at once and generally, challenged? But a few years since,—and with what difficulty was the *Beurré Bosc* suffered among the choicer Pears which this Society advised the community to cultivate! It is not so many years ago that the late Charles Richardson exhibited *Triomphe de Gand* Strawberries, for six successive weeks, in this Hall, that were never since equalled by the specimens of any variety,—whether you consider fecundity, size, or quality. But the Triomphe became unpopular as it was found that it must be grown with the sweat of the brow; and the name of its ceaseless successors is legion. Which

of them all stands in as high repute as does that old and tried variety, even now? How many of them all have not, figuratively speaking, surviving Drought and kindred ills, disappeared beneath the dead sea of oblivion!

Prove all things, if you will, and as you will! but,—hold fast to a good thing when you have it in hand.

Prove all things! And, above all, test first the healthy growth and fecundity, in our immediate vicinity and throughout our extended County, of every new local variety. Diffuse a knowledge and disperse scions of *Earle's Bergamot!* not alone as a tribute to the memory of our late learned associate, but that it may be determined satisfactorily if its high quality in Worcester necessarily deteriorates in Fitchburg or Southbridge. Disseminate the *Worcester Spy!* no matter how you view its eccentric and concentric namesake,—a variety now localized, whencesoever its actual origin. Keep an expectant and watchful eye upon the *Dawson!* that new seedling, so lately introduced to your notice. Of these two latter varieties, be their future what it may, this at least may now be said, by men of keen and accurate judgment; who form their own opinions, never accepting them at second-hand; that each is beautiful to a degree almost unrivalled, each is sprightly and vinous, each matures when you have little else and certainly nothing of like quality: both conforming to the far-sighted and wise exaction of Marshall P. Wilder that fruit shall be "to the manner born"; and both at home in Worcester County? Cannot the *Leicester Sweet* and the *Sterling;* the *Mother* and the *Hubbardston Nonesuch* accord to them all honor and recognition? Can they not, possibly, yield a secondary rank to the *Red Russett;* naturalized indeed, yet perfectly at home among us, and perhaps better appreciated here than in the place of its origin?

Speculative science has not yet succeeded in proving the evolution of Man from the Monkey. Yet this affinity is strongly evidenced by their mutual capacity for imitation; a rivalry wherein odds can be given, safely, by neither. Thus, at the late Floral Display, within the Rink, many of the works of the Creator were closely copied: as closely as they could be, that is, with flowers and foliage wrested and perverted to that mis-use.

But it was never Design! The Arch of Heaven is resplendent with stars. But why should their apparent form be repeated, since that form, after all, is simply arbitrary and illusive. There can be "no crown, if no cross"! we were told, at the cost of despoiling Garden and Greenhouse. Theologically, the doctrine may be sound—and fury, signifying nothing. But what Florist need be beholden to theological schools, when a higher command bids him look from Nature, up to Nature's God,—considering the lilies of the field! Design is manifested in the flower itself: not in the morbid and unnatural shapes into which it may be distorted. By hybridizing and cross-fertilization, the Florist may accomplish as it were, a novel creation: never by the use of sheet-iron and wire. Shall the "counterfeit presentment" of a municipal seal, with whatsoever skill it may be manipulated, be an exception? Anatomically inaccurate,—a fault of the original from which it was copied; does the elaborate conceit add anything to our knowledge of flowers; or extend our acquaintance with the laws that control and regulate their growth? We sometimes hear of a pretty man. He looks, it is said, as if he had just been taken from a band-box. Would it be a triumph of the Florist's art to multiply that species, by an effective and fragrant combination of datura, marigold, and skunk-cabbage! Yet, would not that also be a Design? evincing the skill of the artist and, as well, challenging the applause of the groundlings.

Why should not the Florist, if he must work with artifice, avail himself of the full measure of his opportunity? Why should he not rise to the grandeur of original conception; and, supplying shape and substance from his greenhouse, and his inner consciousness, in about equal proportions, produce to an astonished world, the—Missing Link!

He who cannot look his fellow in the eye, in entire faith and persuasion of the truth of his cause, cannot expect to convince an audience, from the outset sufficiently reluctant. Incorporated to "advance the Science" of Horticulture! What is "Science"? Is it to know? from its verb. And yet the wisest of the old Philosophers declared that he knew most who thoroughly realized the extent of his own ignorance. The General Court were of the opinion, Forty Years ago, that there is a Science of Horticul-

ture. They granted your fathers a Charter that they might the better advance and promote it. The local Assessors set aside the judgment of the Legislature; overrule your plea that you advance and promote the Science and Practice of Horticulture, and should therefore be exempted from Taxation in common with other Agricultural and Scientific Associations; and doom you, as ever, to contribute one-fifth of your substance for the support of those who toil not, neither do they spin. Even in the Jewish Theocracy, Jehovah insisted upon but one-tenth; and He, according to Moses, was pretty tenacious of His own.

"What shall the harvest be?" is a conundrum often propounded by the shearers of the sheep? But they,—if it chances to be the odd-year for a crop of affrighted souls, have at least, the unshared luxury of exemption from taxation for the support of the common burden. We sustain the load that should be lightened by a partial shift to their shoulders—the middle-men of religion. Thus assured of an easy time in this world at our expense, why should they not arrogate to themselves a monopoly of Heaven, all the more selfish that it can view the sentence of those very tax-paying townsfolk and kinsmen, throughout a hopeless eternity, with a complacency foreordained and devout.

Not much should be anticipated from Universalism. Its faith would not make Wachusett budge an inch; while, as for works, like all the rest, it teaches that one fist should not be too inquisitive when the other is shut tight. So that if it sings of "The Flower Girl," "Here in Cool Grot;" and loses memory of "The King's Champion" in "The Sailor's Grave;" we simply recognize a peculiar school of divinity and wonder not that it too should enjoy immunity from taxation.

"And it came to pass, in those days, that there went out a decree from Cæsar Augustus, that all the world should be taxed."
"And all went to be taxed, every one into his own city."

Not even the Pharisees being exempt,—"who were the most straitest sect." How much better are we than the Jews! Who, at least, never pleaded in abatement of assessments upon the Temple, that its foundations were laid deep in mortgages.

Still, there is some compensation in return for this immunity;

and the tax-ridden public get a partial recompense, such as it is! provided they pay an admission fee. Thus, on the 7th of February, ulto., the evening was improved in Pilgrim Vestry, by its "Social Union," in cultivating the memory of that eminent expounder of Orthodoxy and consistent follower of John Knox, —some paces to the rear,—Robert Burns! One of the worshippers had left her "Heart in the Highlands," a fact which would augur badly for future palpitations. Another sang "My Heart is sare for somebody!" betraying a fleshly and miscellaneous hankering on her part, or else that the doctor might expect a speedy job. Finally, they paired (this was just a week before St. Valentine's Day, take notice!) and the couples chirruped forth, in a common gush,

"My Love is like a Red, Red Rose!"

which comparison, to say the least, usurps some license with Gen. Jacqueminot.

A few months later, in the same untaxed House of God! its "United Societies" offered "Selections from the poems of Longfellow, with Dissolving Views;" happily combined in the felicitous description of the Poet:—

"She has a bosom as white as snow,
Take care!
She knows how much it is best to show,
Beware! Beware!
Trust her not,
She is fooling thee!"

Cheap enough that for Twenty-five cents, and only half-price for Sunday-Schools! Can they beat it among the ascetics of Utah!

Such is exemption in its actual workings! What Taxation is, you do not need to be informed by me.

The *First Official Record* of this Society is attested by the signature of Samuel F. Haven. Other gentlemen had held the post of Secretary for weeks, or months, as a matter of accommodation; but, from 1841 to 1847, its increasing duties were performed by Mr. Haven with that diligence and fidelity which never failed to characterize him in whatever he undertook. The volumes of your Transactions, in the earlier years, are enriched by Reports from his pen, which was always ready, at call, to describe flower or fruit. Editor of the *National Ægis*, in which

occupation he preceded the present writer; he was enabled to render the infant Society material advancement. And here it may perhaps be pertinent, to take note of the assistance to Horticulture, in its struggle for existence throughout this City and County, that was ever cordially rendered by the conductors of the local newspapers. Their columns were always open to statement, or Report, that would help on the cause; without which publication it would be impossible, at this day, to trace the successive steps towards the present high plane of development. Nor is that spirit of kindness diminished by the lapse of time. What Earle, and Thomas Drew, in the *Spy*; and William Lincoln, William N. Green, and Samuel F. Haven, in the *Ægis;* advocated and encouraged; in the interest of the common welfare and a more refined public taste: that, the *Spy*, and the *Gazette*, under their later management, have never failed to forward by all legitimate influences. It is not every community, wherein so much can be declared with absolute unreserve.

With Lemuel B. Hapgood, who died in the adjoining town of Shrewsbury, on the 22nd of February, ult., your *Secretary* had but a limited personal acquaintance. He can well recall, however, the punctuality of his appearance at our Annual Exhibitions, some forty years ago; and the sure reliance upon his ample and excellent contributions to our tables that was seldom disappointed. In a sketch of his life it has been stated that his earlier years were passed in the town of Grafton; whence he soon returned to Shrewsbury, buying a farm contiguous to the paternal homestead, and (what was better), taking unto himself a wife. A few years subsequent, his father, desiring relief from the care of a farm of 200 acres, so arranged that our late deceased associate returned to the place of his birth, thenceforward to remain his home. The estate being now his own, Mr. Hapgood, like his father before him, became an extensive and successful farmer. How extensive, and how successful! your published Transactions, and the Reports of the Agricultural Society, bear faithful if inadequate witness.

Jonathan Forbush was, for many years, a Trustee, and Vice-President, of this Society. Having accumulated a handsome

competence in the Shoe and Leather trade, in Boston; he removed his residence, A. D. 1848, to the town of Bolton, in this County; purchasing the large estate of Sampson V. S. Wilder, a noted man in his generation, and himself a Horticulturist of no mean repute. In Bolton, says one who knew him well, Mr. Forbush "lived from 1848 onward, employing many men in the culture of his rich and extensive lands, and dispensing a large and generous hospitality. His life was full of stir and activity, and he found thorough pleasure in the many labors and enterprises which he was superintending. No man in all that region was more known and honored than he. He seemed to keep the world about him in healthy motion."

In an address delivered by the President of this Society, A. D. 1853; before the *Secretary* had usurped that most laxative and lucrative official function; *Hon.* Stephen Salisbury thus expressed himself:

"Without compensation, and with great expense and pains, Mr. Forbush of Bolton; the Messrs. Capron, of Uxbridge; Mr. Bond, of Brookfield; and other gentlemen from remote places; have brought most valuable contributions to our Shows. I desire to offer to these gentlemen, and to others, a better inducement, if not a full compensation, for the efforts which they so liberally and usefully make."

Mr. Forbush was prompt to test new varieties of fruit, and ready to disseminate them when his judgment approved. The Knevett's Giant *Raspberry*, first exhibited here by our associate, Mr. Hadwen, was obtained from him. His love for Horticulture continued with him through life; or until misfortune constrained the relinquishment of that most congenial pursuit. His last years were spent in Lancaster, whence he "passed away quietly, like one going to sleep." He died on the 11th of July ulto., and rests beneath the shades of Mt. Auburn.

Thomas M. Lamb was known to most of those who hear me. How zealous he was in whatever he undertook need only be recited for his permanent record. So long as he could, he never omitted his individual contributions to our Exhibitions. An enthusiast in the cultivation of the Grape, he chiefly deplored the progress towards greater density of settlement, in his neighborhood, because it deprived him of the sunlight so essential to the

growth of his favorite fruit. He was conscientious to an extreme. When the writer remonstrated with him for declining a re-election upon the Board of Trustees, Mr. Lamb replied that, as he was no longer able to place anything upon our tables, he thought it his duty to give way to some one who could. Of him it may be truly said, that he labored with assiduity in the positions assigned to him; and that those who knew him most intimately are his sincerest mourners.

Jonathan Grout became and continued a zealous Horiculturist, during the second and third decades of our Society. It was natural that this should be so; for his kith and kin had been rooted in the soil of Worcester for many generations. Our late associate was an enterprising stationer and bookseller, in his earlier career; taking therein the first steps towards an accumulation of property for which he never lost the faculty. When his attention was turned to Pomology, he had the rare good fortune to enjoy the friendship and proximity of the late John C. Ripley; whose intimate acquaintance with fruit; its varieties and comparative excellence; was equalled only by his willingness to impart that knowledge to all, and any, who could penetrate beneath the veil of a modest diffidence that shrank from the least semblance of obtrusiveness. His advice, especially concerning Pears; of which he had educated himself to be, perhaps, the most exact judge that our Society ever ranked among its members, was of infinite service to the new beginner.

Mr. Grout was also fortunate in the date of his enterprise; for Samuel H. Colton and Daniel Waldo Lincoln were withdrawing, or had already retired, from the Nursery business; and he had absolutely no rivals: certainly none upon the scale to which he speedily enlarged his operations. There may be some exaggeration in the statement: but it has been asserted, by those who should be well-informed about the facts, that his importations of Pear-trees from France amounted to 10,000 annually. He also engaged largely in the cultivation of Roses; and was eminently successful whenever he competed for the prizes offered, at our Summer Exhibitions, for that noblest of flowers. He strove ever for the first place; and the very effort went far, by its earnestness, to challenge and win the final triumph.

His death occurred on the evening of April 5th, A. D. 1882.

Alexander Hamilton Bullock was familiarly and best known to this community as an able statesman, an accomplished scholar, —an eloquent Orator. Shall we therefore forget that he was our President, from A. D. 1860, to 1863, or until the exacting demands of a wider public service left him but little leisure for quieter and more attractive occupations. But, while enjoying public life, with its legitimate honors; our friend shrank, with almost feminine nervousness, from the trickery and venality of demagoguism, that, latterly, have grown to be almost indispensable to success in politics. An anecdote might be told in this connection, by way of illustration; yet, as it would be about as broad as long, your ears are spared, in deference to the presence of ladies, whose rights I suppose that I am now bound, as a Democrat, to concede. While his time was his own, you could command his services: unable to be in two places, at once, he recognized that his proper post was on Beacon Hill. His interest, especially in Pomology, was not suffered to abate on any such account: as his contributions to our Exhibitions, and frequent conversations with your *Secretary*, bore ample and adequate evidence.

He had rare enjoyment of a good joke which, if it was at his own expense, suffered nothing in the relation. I well remember one that gave him great relish and which was told with unction. Col. Bullock (his title then related to the staff, to whose command-in-chief a grateful people soon accorded promotion); had been greatly puzzled, perhaps provoked, by the long time consumed by some of his Pears, before the trees came into bearing. He finally called into council one of our veteran Pomologists;—a gentleman from Shrewsbury, whose worship of Ceres and Pomona was equalled only by his idolatry of the late Charles Allen; and, pointing out a tree which had continued barren for some fifteen years, asked, innocently enough,—'*With what variety would you graft that?*' 'Regarding the tree and then myself' said the Colonel, 'he uplifted both hands and exclaiming in tones of pious horror,'—"*What! graft the Bosc!*" retreated in comparative good order, but somewhat demoralized by the unwonted ordeal, upon his native town. "For a long time,—"

added our honored associate, "I was perplexed to decide whether I had spoken disrespectfully of the Ecliptic, or had committed The Unpardonable Sin!" Of this last,—he could have acquitted himself, upon reflection;—for he was never remiss in the payment of his Pew-Rent. Concern for the health of those dearest and nearest to him compelled long absences from his home; and much of the time during the later years of his life, was spent abroad. But he was no idle lounger; seeing nothing, and failing to profit by his opportunities for observation. He told me much about what he had noticed in the markets of Paris; that there was fruit in plenty, but not, as in the United States, for the People. Referring to Pears,—he found but one or two varieties of apparent superiority to those we have in Worcester; and, for ripe specimens of such, which he purchased out of curiosity so as to be at liberty to test their quality, he was obliged to pay a Franc each. For a person fond of fruit, and liking it in plenty, it seemed to him that few places could claim equality with that modest, inland city, wherein he had so long made his hospitable and pleasant home.

Let this Society never forget to be grateful for the services which he was able and glad to render to the Science and Practice of Horticulture, amid the distractions of an active and exciting public career.

John C. Whitin was a Vice-President of this Society from A. D. 1853, to 1860, when he voluntarily retired; his private affairs exacting his undivided attention.

"He was born," says his local biographer, "in Northbridge, in the village which bears the family name, A. D. 1807, his father being Col. Paul Whitin, who settled there in 1782. His father was a blacksmith, and the son began work, as a child, in the picker room of the Northbridge Manufacturing Company, which his father had organized. At 12 years of age he was transferred to the machine-shop of the mill, and stayed there three years, having the benefit of the common schools of the time. * * * * *
His first patent was on a picking machine, in 1832, and from then his record was one of continual and successful improvement in every portion of the mechanical equipment of a cotton factory. His inventions were accepted by the trade generally, and the business of machine building grew steadily until the great shop, 303 by 102 feet, was built, in 1847. As business increased, a division became desirable, and Mr.

Whitin assumed control of the Machine-Works, which have grown into an immense establishment, employing over 700 men. He bought the Holyoke Machine-Works, in 1860, but, after running them successfully for four years, he sold them; concentrating all his energies on the works at home which in 1870, were organized into a stock company as the Whitin Machine Works."

His death occurred upon Saturday, April 22d, in the current calendar year.

As a prominent manufacturer of machinery, in New England; whose name was a synonym throughout the Republic for that of an upright and energetic citizen; to whom failure, or mishap, in business, was unknown because never even tolerated in contemplation; John C. Whitin towered among the giants of a generation from whom, in some inexplicable way, was spawned the so-called American System, to which their own lives had been a conspicuous and vital defiance. Accepting its inevitable bounties; which indeed he could not reject by indirection; he yet, in conversation with your *Secretary*, repudiated them as an unnatural stimulus, and therefore not beneficial to their recipients. But the wealth which they finally aggregated, at first almost without effort; and thereafter, by the very momentum of the system; could not have filled cleaner or better hands, animated by a larger heart.

Whoever has seen Whitinsville (why, longer, '*ville*'?) has beheld a village of neat and homelike settlement. Our lamented friend could not tolerate a slouch and abhorred what was slovenly. If he was reclaiming a wood land of Eighty (80) Acres, the stumps must be eradicated, and the rocks consumed by a wall not less than seven (7) feet in breadth and height. He even confessed to your *Secretary*, on their return from a Corporation Meeting, in Providence; both being in a condition of shareholding acquiescence and servility; that he fully accepted the theory of Ensilage. Can any one doubt it, who has seen his large and extensive Silos? He had faith in honest and durable work; and therefore he built for posterity. But, so building,—no account for depreciation needed to be opened in his lifetime.

His contributions to your Exhibitions have been manifest, if not from their frequency; which could scarcely be expected

considering the distance; at least from their excellence. If he was fortunate in the accomplished Florist and Gardener who so skilfully fulfilled his wishes, and supplemented them by his individual conceptions; none the less should be his own credit for just appreciation.

His liberality was unstinted, if discriminating. When the *Senior* Salisbury,—our life-long benefactor,—felt that the renewed efforts for wider usefulness, put forth by this Society, were, to some extent, hampered by Debt; and proffered a most munificent sum as his individual contribution towards its extinguishment; the response of John C. Whitin was cordial and substantial. Where he recognized desert, he needed no importunity. Perhaps he might reproach himself that he had not been quick enough to anticipate the need, in advance of solicitation.

The modern Pharisee may cant unctuously about schools and colleges and churches;—the abstract blessing of a simple existence in New England. This strong man had merely the Common Schools, in his youth; and his practical religion came to a mind naturally devout. He lived his life. Can more be said, in his praise?

Is the land, wherein the fortunes of these men were cast, the better for their having lived in it? If so,—who shall say that, had their energies and talents been otherwise directed, it would have enured more to their private advantage and that of their race! Who shall decide that this, or that, man, was blind to the bent of his genius? Had he looked with the eyes of his critics, might he not, instead of blazing out a path, have fallen into a rut!

If they caused two blades of grass to grow where was but one before; if they made a wilderness blossom as the rose; if Bolton, or Worcester; Whitins, or Shrewsbury; are happier and fairer because these men spent, and were spent, among their immediate civic, or woodland, scenes; what higher eulogy shall be theirs? What nobler epitaph could be inscribed, than that they were public benefactors in life; and that the communities which mourn their loss find none to supply their place?

Nature is said to abhor a vacuum! In its failure, or omission, can Horticultural science, or practice, supply recruits;—volunteers, or substitutes;—to fill these gaps in our ranks?

All which is respectfully submitted, by

EDWARD WINSLOW LINCOLN,
Secretary.

HORTICULTURAL HALL,
Worcester, Massachusetts, November 1st, A. D. 1882.

REPORT OF THE LIBRARIAN.

To the Members of the Worcester County Horticultural Society:

Your Librarian in the discharge of his duty of reporting upon the condition of the Library, will say that the number of Books and Periodicals issued during the year just closed is 475; which is a slight increase over last year. The additions by purchase and gift are as follows:

Rutter on the Peach; Society.

Notes on Lilies; by Dr. Wallace; Society.

Natural History of Plants; by H. Baillon; Society.

North American Lichens; by Tuckerman; Society.

Notes on Money, Trade and Banking; by J. H. Walker; Author.

Vegetable Mould and Earth Worms; by Charles Darwin; Society.

Memorial History of Boston; 4 vols.; Justin Winsor; Society.

The Horticulture of Boston; by Marshall P. Wilder; Author.

The Rose; by H. B. Ellwanger; Author.

A Glimpse at Michigan Horticulture; by Chas. W. Garfield.

Transactions of the Hingham Agricultural and Horticultural Societies; F. H. Lincoln, Secretary.

Eulogy on James A. Garfield; by Geo. F. Hoar; Author.

Report of the Worcester Schools; 1881; A. P. Marble.

Public Statutes of Massachusetts; 1882; Society.

Transactions of Massachusetts Horticultural Society, 1881; Part 2; R. Manning, Secretary.

Department of Agriculture; Report 1880; W. W. Rice.

Proceedings of a Convention of Agriculturists held in the Department of Agriculture, Jan. 10 to 18, 1882; Henry Phelps.

Report of Estimated Production of Cereals of the United States for the year 1881; Department of Agriculture; Henry Phelps.

Report of the condition of Winter Grain, the progress of

Cotton and Corn Planting, rate of Wages and results of Tile Draining; May, 1882; No. 43; Department of Agriculture; Henry Phelps.

Special Report; No. 44; Department of Agriculture; Henry Phelps.

Report upon the Acreage and Condition of Cotton, the condition of all Cereals and the area of Spring Grain; June, 1882; Department of Agriculture; Henry Phelps.

Report upon the Area and Condition of Corn, the Condition of Cotton and of Small Grains, Sorghum, Tobacco, &c.; July, 1882; Department of Agriculture; Henry Phelps.

Fertilizers; Co-operative Experimenting as a means of Studying the effect of Fertilizers, and the feeding capacity of Plants; by Prof. W. O. Atwater; Department of Agriculture; Henry Phelps.

Speech of Hon. W. W. Rice of Massachusetts, delivered in the House of Representatives, June 20, 1882.

Address of Hon. Marshall P. Wilder and the other proceedings at the New England Genealogical Society, Jan. 4, 1882.

Report upon the condition of Corn, Cotton, Potatoes and Fruits, &c.; No. 49; Department of Agriculture; Henry Phelps.

Catalogue of Works on Bibliography, Typography, and Literary History; by Bernard Quaritch.

Vick's Monthly Magazine; 1882; Society.

The Garden; an Illustrated weekly journal; 1882; Society.

The Gardener's Chronicle; Vol. 15; weekly journal; 1882; Society.

The Agricultural Gazette; London; 1882; Society.

The American Agriculturist; 1882; Society.

The Gardener's Monthly; Vol. 24; 1882; Society.

The Country Gentleman; Vol. 47; 1882; Society.

The Fruit Recorder; 1882; Society.

The Massachusetts Ploughman; 1882; *Courtesy* of ye Ploughman.

The Worcester Directory; 1882; Society.

The Fruits and Fruit Trees of America; by A. J. Downing; Second Revision and Correction with the Appendices of 1872 to 1881, and containing many new varieties; by Charles Downing; Author.

Annual Report of the Commission of Public Grounds, A. D. 1881; E. W. Lincoln, Chairman.

Department of Agriculture; Special Report; No. 40; the condition of Spring Wheat Culture in the Northwest; H. Phelps.

Department of Agriculture; Special Report; No. 11; on the Silk Worm; H. Phelps.

Department of Agriculture; Special Report; No. 31; Third Report of Contagious Pleuro-Pneumonia; H. Phelps.

Department of Agriculture; No. 1; Statement of the Cane-Sugar Industry; H. Phelps.

Department of Agriculture; Special Report; No. 3; on the Culture of the Chinese Tea Plant in the United States; H. Phelps.

Address of Hon. Geo. B. Loring and other proceedings of the Cotton Convention held in Atlanta, Ga., Nov. 2, 1881; Henry Phelps.

Department of Agriculture; Special Report; No. 4; on the Cultivation of the Fig and Date Palm; Henry Phelps.

All of which is respectfully submitted.

CHARLES E. BROOKS,
Librarian.

HALL OF FLORA,
November 1, 1882.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR

1883.

The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

Worcester, Mass.
CHARLES HAMILTON, PRINTER,
311 MAIN STREET,
1883.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

James Draper, *Chairman.*
James F. Allen.
George Cruickshanks.

Calvin L. Hartshorn,
Hermann F. A. Lange,
Newell Wood,
W. W. Cook,
O. B. Hadwen,
Charles E. Parker,
William H. Earle,
Charles E. Brooks.

President—Francis H. Dewey.
Secretary—Edward W. Lincoln,
Nos. 5 Oak, and 18 Front Streets.

JUDGES OF AWARD.

Flowers, Plants, Etc.—Hermann F. A. Lange.
Fruits, Vegetables, Etc.—James Draper.

COMMITTEE ON NOMENCLATURE.

James F. Allen,
Hermann F. A. Lange,
George E. Francis,
O. B. Hadwen.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premiums must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small Fruits* must be entered in boxes or baskets (except in the case of Strawberries, which are to be shown "*flat*"); but they may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

E. The Judges may correct, before the close of any Exhibition, awards made by them, if satisfied that such were erroneous.

F. The cards of competitors shall be put, reversed, beneath the plates; and the Judges of Award shall be excluded from the Hall of Exhibition until the Exhibition itself is ready for judgment.

G. Competitors are expected to conform strictly to the conditions under which articles are invited. Evasion or violation of them may be reported to the TRUSTEES for future disqualification of the offender.

RULES AND REGULATIONS.

1. Exhibitions will be held on every Thursday afternoon, commencing March 1st, and terminating October 25th, A. D. 1883. The hours of exhibition will be between 3 and 4.30 o'clock. Articles offered for premium must be in the Hall by 2.15 o'clock, P. M., of the days of exhibition. Between 2.15 and 3 o'clock the Hall will be in exclusive charge of the Secretary, and the Librarian, who will allow no one else to be present.

The Judges of Award will be admitted under the limitations of General Rule F.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester*, for a period of at least one (1) month previous to the date of exhibition.

3. After the articles are arranged they will be under the exclusive charge of the Judges, and *not even the owners* will have liberty to *remove* them until the exhibition is closed, when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits or Vegetables is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Judges to *exclude from competition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste. The Judge of Fruits, in making Awards, will especially regard uniformity in size, symmetry of form, and beauty in color.

7. The Committee of Arrangements have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary; and the Secretary is requested to give notice of one week, in some daily paper, and also at the preceding Exhibition, when a change in the schedule is proposed.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables, under different names, or exhibiting as grown by himself, Flowers, Fruit or Vegetables grown by another, thereby violating the objects and rules of the Society, shall be debarred from competing for the Society's premiums until reinstated.

9. No Flowers, Plants, Fruits or Vegetables will be entitled

to a premium unless they possess points of superiority; and the Judges are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them; nor shall any specimen for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

11. In all exhibitions of Cut Flowers, the use of foliage must be restricted to that of the varieties shown; and not more than three blooms, clusters, or spikes, all which shall be of one color, and of one variety, shall be allowed in the same bottle, except when otherwise specified in the schedule.

12. No Judge shall award a premium or gratuity in any case wherein he is a competitor, or has an actual or resultant interest: in any such case the judgment shall be rendered by any three of the Committee of Arrangements and Exhibitions whom the Judge shall invite.

13. No Judge shall require anything of competitors respecting their exhibits, which is not distinctly specified in the schedule. No Flowers, Fruits, etc., etc., shall be put on the tables, for competition for premiums, by any person who is a judge as to the awards to be made for Fruits, Flowers, etc., etc.

14. All premiums that are not claimed within three months after the close of the official year shall be forfeited to the Society.

15. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

16. "Downing's Fruit of America," revised edition, will guide the Judge of Fruits in his decisions upon matters at issue.

☞The Judges are authorized by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

FLOWERS, PLANTS, FRUITS & VEGETABLES.

A. D. 1883.

FLORAL: SPECIAL RULE.—In all cases where dimensions are prescribed for exhibits, the measure shall be understood to be that of the flowers, solely; never admitting the basket, foliage, or any garniture of green.

Thursday, March 1.

AZALEA INDICA.—

No. 1.	Three plants in bloom, three premiums	$5 00	3 00	2 00
No. 2.	One plant in bloom, two premiums.		3 00	2 00

PRIMULA SINENSIS.—

No. 3.	Four plants in bloom, three premiums	$3 00	2 00	1 00
No. 4.	One plant in bloom, two premiums.		1 00	50

APPLES.—

No. 5.	McClellan, three premiums	$1 50	1 00	50
No. 6.	Tompkins Co. King, three premiums	1 50	1 00	50

PEARS.

No. 7. Any variety, 12, gratuity.

VEGETABLES.—

No. 8.	CABBAGE, Flat Dutch, three premiums	$1 50	1 00	50
No. 9.	SQUASH, Marblehead, three premiums	1 50	1 00	50

Thursday, March 8.

CINERARIA,—IN BLOOM.—

No. 10.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

HYACINTHS,—IN BLOOM.—

No. 11.	Six, three premiums	$3 00	2 00	1 00
No. 12.	One, two premiums		1 00	50

APPLES.—

No. 13.	American Golden Russet, 12, three premiums	$1 50	1 00	50
No. 14.	Leicester Sweet, three premiums	1 50	1 00	50
No. 15.	Northern Spy, three premiums	1 50	1 00	50

PEARS.—

No. 16. Any variety, 12, gratuity.

VEGETABLES.—

No. 17.	CABBAGE, 3 specimens, Savoy, three premiums	$1 50	1 00	50
No. 18.	SQUASH, 3 specimens, Hubbard, three premiums	1 50	1 00	50

Thursday, March 15.

CYCLAMENS,—IN BLOOM.—

No. 19.	Four, three premiums	$3 00	2 00	1 00
No. 20.	One, three premiums	1 50	1 00	50

CUT FLOWERS.—

No. 21.	For stand of twenty-four blooms or clusters, distinct, three premiums	$3 00	2 00	1 00

APPLES.—

No. 22.	Baldwin, 12, three premiums	$1 50	1 00	50
No. 23.	Belleflower (Yellow), three premiums	1 50	1 00	50
No. 24.	Cogswell, three premiums	1 50	1 00	50

No. 25.	Greening (R. I.), three premiums.	1 50	1 00	50
No. 26.	Ladies' Sweet, three premiums....	1 50	1 00	50

PEARS.—

No. 27. Any variety, 12, gratuity.

VEGETABLES.—

No. 28.	CABBAGE, 3 specimens, Red Dutch, three premiums.....	$1 50	1 00	50
No. 29.	TURNIP, 6 specimens, Swede (White, or Yellow), three premiums....	1 50	1 00	50

Thursday, March 22.

RICHARDIA ÆTHIOPICA,—IN BLOOM.—

No. 30.	One plant, three premiums.....	$3 00	2 00	1 00
No. 31.	One bloom, with foliage (the largest).....			1 00

BOUQUET—(HAND).—

No. 32.	Not more than seven in. in diameter, exclusive of foliage, or green, three premiums.....	$3 00	2 00	1 00

APPLES.—

No. 33.	Old Nonesuch, 12, three premiums	$1 50	1 00	50
No. 34.	Peck's Pleasant, three premiums..	1 50	1 00	50
No. 35.	Sutton Beauty, three premiums...	1 50	1 00	50
No. 36.	Tallman Sweet.....	1 50	1 00	50
No. 37.	Washington Royal.....	1 50	1 00	50

PEARS.—

No. 38.—Any variety, 12, gratuity.

VEGETABLES.—

No. 39.	BEETS, six specimens, Turnip, three premiums	$1 50	1 00	50
No. 40.	CARROTS, six specimens, Intermediate, three premiums.....	1 50	1 00	50
No. 41.	LETTUCE, six heads, three premiums	1 50	1 00	50

Thursday, March 29.

CUT FLOWERS—BASKET.—

No. 42.	For the best round basket, on stand, ten inches in diameter, three premiums.	$3 00	2 00	1 00

APPLES.—

No. 43.	Russet (Golden), 12, three premiums	1 50	1 00	50
No. 44.	Russet (Red), three premiums	1 50	1 00	50
No. 45.	Russet (Roxbury), three premiums	1 50	1 00	50
No. 46.	Spitzenberg, three premiums	1 50	1 00	50

PEARS.—

No. 47. Any variety, 12, gratuity.

VEGETABLES.—

No. 48.	Cucumbers, two specimens, White Spine, two premiums		1 50	1 00
No. 49.	Parsneps, six specimens, two premiums		1 50	1 00
No. 50.	Radishes, two bunches (6 in each bunch), two premiums		1 50	1 00

Thursday, April 12.

ZONALE GERANIUMS,—in bloom.—

No. 51.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

PANSIES,—in bloom.—

No. 52.	Six plants, distinct in color, grown in 6 inch pots, three premiums	$3 00	2 00	1 00

VEGETABLES,—four varieties.—

No. 53.	Beets, one half-peck	Three premiums.		
No. 54.	Potatoes, one half-peck			
No. 55.	Ruta Baga, six specimens	$3 00	2 00	1 00
No. 56.	Squashes, three specimens			

Thursday, April 19.

BEGONIA,—IN BLOOM.—

No. 57.	One plant, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 58.	One stand, three premiums.....	$3 00	2 00	1 00

VEGETABLES.—

No. 59.	HORSE RADISH, five roots, two premiums		$1 50	1 00
No. 60.	PARSNEPS, ten, of the same variety, two premiums.....		1 50	1 00
No. 61.	RHUBARB, ten stalks, same variety, two premiums.....		1 50	1 00

Thursday, April 26.

PANSIES,—NO DUPLICATES.—

No. 62.	One stand, and one spike to a vial, three premiums.....	$3 00	2 00	1 00

APPLES.—

No. 63.	Any variety, three premiums.....	$1 50	1 00	50

VEGETABLES,—THREE VARIETIES.—

No. 64.	DANDELIONS, one-half peck.....	Three premiums.		
No. 65.	ONIONS, one half-peck.....	$2 00	1 50	1 00
No. 66.	SPINACH, one half-peck.....			

Thursday, May 3.

HYACINTHS,—OPEN CULTURE.—

No. 67.	Display, three premiums.....	$3 00	2 00	1 00

POT PLANTS,—IN BLOOM.—

No. 68. Gratuities, if merited.

VEGETABLES.—

No. 69.	CUCUMBERS, two,—two premiums..		2 00	1 00

No. 70.	LETTUCE, four heads, two premiums		2 00	1 00

Thursday, May 10.

TULIPS,—OPEN CULTURE.—

No. 71.	Display, three premiums	$3 00	2 00	1 00

BOUQUET. (HAND).—

No. 72.	To be seven inches in diameter, exclusive of foliage, or green, three premiums	$3 00	2 00	1 00

VEGETABLES.—

No. 73.	ASPARAGUS, two bunches, of twelve stalks each, three premiums	$1 50	1 00	50
No. 74.	DANDELIONS, half-peck (cultivated), two premiums		2 00	1 00
No. 75.	SPINACH, half-peck, two premiums.		2 00	1 00

Thursday, May 17.

BULBS,—(HARDY),—OPEN CULTURE.—

No. 76.	Display, three premiums	$3 00	2 00	1 00

BASKET,—ON STAND.—

No. 77.	Ten inch oval, with handle, three premiums	$3 00	2 00	1 00

FUCHSIA,—DISTINCT VARIETIES.—

No. 78.	Four plants in bloom, three premiums	$3 00	2 00	1 00

VEGETABLES.—

No. 79.	ASPARAGUS, two bunches, of 12 stalks each, two premiums		2 00	1 00
No. 80.	RHUBARB, five stalks, two premiums		2 00	1 00

Thursday, May 24.

PELARGONIUM—(FANCY AND SHOW),—IN BLOOM.—

No. 81. Four plants, of distinct varieties, three premiums.....$3 00 2 00 1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 82. Stand, three premiums.....$3 00 2 00 1 00

Thursday, May 31.

CUT FLOWERS,—(FROM HARDY PLANTS AND SHRUBS).—

No. 83. For the best display, open culture, three premiums.....$3 00 2 00 1 00

RHODODENDRONS.—

No. 84. For the best display, three premiums $3 00 2 00 1 00

AZALEA—(GHENT).—

No. 85. For the best display, three premiums $3 00 2 00 1 00

AZALEA—(MOLLIS).—

No. 86. For the best display, three premiums $3 00 2 00 1 00

VEGETABLES.—

No. 87. RADISHES, twelve specimens, two premiums $2 00 1 00

Thursday, June 7.

PÆONIA.—

No. 88. For the best display, three premiums $3 00 2 00 1 00

IRIS.—

No. 89. For the best display, three premiums $3 00 2 00 1 00

HYDRANGEA,—ONE PLANT, IN BLOOM.—

No. 90.	Hortensis, two premiums.....		$2 00	1 00
No. 91.	Otaksa, two premiums.....		2 00	1 00
No. 92.	Thomas Hogg, two premiums		2 00	1 00

VEGETABLES.—

No. 93. Gratuities for meritorious specimens.

Thursday, June 14.

AQUILEGIA,—(COLUMBINE),—IN VARIETY.—

No. 94.	Stand, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS.—

No. 95.	ONE STAND,—the varieties of any species must not exceed three, three premiums.....	$3 00	2 00	1 00
No. 96.	ONE VASE,—the specimens not to be tied or wired, two premiums.		2 00	1 00

NATIVE FLOWERS.—NAMED VARIETIES.—

No. 97.	Stand, three premiums.....	$3 00	2 00	1 00

STRAWBERRIES.—

No. 98.	Crystal City, 25 berries, flat, three premiums	$1 50	1 00	50
No. 99.	Downer's Prolific, 25 berries, flat, three premiums	1 50	1 00	50

VEGETABLES.—

No. 100.	BEETS (Early), twelve specimens, two premiums.....		$2 00	1 00

Thursday, June 21.

ROSES,—[TO BE SHOWN IN THE BOXES OF THE SOCIETY].—

No. 101.	For the best twelve blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums.....	$4 00	3 00	2 00

No. 102.	For the best six blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums	$3 00	2 00	1 00
No. 103.	For the best stand of named Roses, three premiums	5 00	3 00	2 00
No. 104.	For the best Basket or Dish of Roses, two premiums		2 00	1 00
No. 105.	*Dianthus barbatus*—(Sweet William).—Stand, three premiums	3 00	2 00	1 00
No. 106.	*Digitalis* — (Foxglove). — Best display, two premiums		2 00	1 00
No. 107.	*Companula media* — (Canterbury Bell).—Best display, two premiums		2 00	1 00

STRAWBERRIES.—

No. 108.	Charles Downing, 25 berries, flat, three premiums	$1 50	1 00	50
No. 109.	Col. Cheney, 25 berries, flat, three premiums	1 50	1 00	50
No. 110.	Crescent, 25 berries, flat, three premiums	1 50	1 00	50
No. 111.	Cumberland Triumph, 25 berries, flat, three premiums	1 50	1 00	50
No. 112.	Hovey, 25 berries, flat, three premiums	1 50	1 00	50
No. 113.	Monarch of the West, 25 berries, flat, three premiums	1 50	1 00	50
No. 114.	Sharpless, 25 berries, flat, three premiums	1 50	1 00	50
No. 115.	Wilder, 25 berries, flat, three premiums	1 50	1 00	50
No. 116.	Wilson, 25 berries, flat, three premiums	1 50	1 00	50
No. 117.	Any variety, fifty berries (flat), gratuities.			

VEGETABLES.—

No. 118.	Peas, one-half peck, American Wonder, two premiums		$2 00	1 00

Thursday, June 28.

BOUQUET—(PARLOR).—

No. 119.	For the best, three premiums...	$3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 120.	Stand, three premiums.....	$3 00	2 00	1 00
No. 121.	BASKET, oval, flat, twelve inches, three premiums.....	3 00	2 00	1 00

STRAWBERRIES.—

No. 122.	Bidwell, 25 berries, flat, three premiums.....	$1 50	1 00	50
No. 123.	Glendale, 25 berries, flat, three premiums.....	1 50	1 00	50
No. 124.	Jucunda, 25 berries, flat, three premiums.....	1 50	1 00	50
No. 125.	Lincoln, 25 berries, flat, three premiums.....	1 50	1 00	50
No. 126.	Manchester, 25 berries, flat, three premiums.....	1 50	1 00	50
No. 127.	Miner's Great Prolific, 25 berries, flat, three premiums.....	1 50	1 00	50
No. 128.	Triomphe de Gand, 25 berries, flat, three premiums.....	1 50	1 00	50
No. 129.	Any other variety, 25 berries, flat, gratuities.			
No. 130.	Any variety, fifty berries, flat, gratuities.			

VEGETABLES.—

No. 131.	BEETS, 10 specimens, summer, turnip-rooted, two premiums,	$2 00	1 00
No. 132.	PEAS, one-half peck, McLean's Advancer, two premiums.....	2 00	1 00

Thursday, July 5.

CLEMATIS,—DISPLAY.—

No. 133.	Of not less than six named varieties, three premiums.....	$3 00	2 00	1 00

LILIUM.—

No. 134.	For the best vase, two premiums,	$2 00	1 00

CUT FLOWERS.—

No. 135.	For the best arranged stand, without restriction as to foliage, varieties, or quantity of flowers, three premiums	$3 00	2 00	1 00

HARDY FLOWERS.—

No. 136.	For the best stand, not seedlings of the current year, three premiums	$3 00	2 00	1 00

RASPBERRIES—(RED).—

No. 137.	Brandywine, one quart, three premiums	$1 50	1 00	50

BLACKCAPS.—

No. 138.	Davidson's Thornless, one quart, three premiums	$1 50	1 00	50
No. 139.	Doolittle, one quart, three premiums	1 50	1 00	50

CHERRIES.—

No. 140.	Any variety, one quart, three premiums	$1 50	1 00	50

CURRANTS.—

No. 141.	Red Dutch, one quart, three premiums	$1 50	1 00	50
No. 142.	White Grape, one quart, three premiums	1 50	1 00	50
No. 143.	Any other variety, one quart, gratuities.			

STRAWBERRIES.—

No. 144.	Any variety, 25 berries, flat, gratuities.			

VEGETABLES.—

No. 145.	Beans (Snap), one-half peck, two premiums		$2 00	1 00
No. 146.	Peas, Champion of England, one-half peck, two premiums.		2 00	1 00

Thursday, July 12.

HOLLYHOCKS.—

No. 147.	For the best display, three premiums	$3 00	2 00	1 00
No. 148.	For the best twelve, distinct colors, three premiums	2 00	1 00	50
No. 149.	For the best six, distinct colors, two premiums		1 00	50

ZONALE GERANIUMS.—

No. 150.	For the best stand, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—

No. 151.	For the best stand, of 24 named varieties, three premiums	$3 00	2 00	1 00

CURRANTS.—

No. 152.	La Versaillaise, one quart, three premiums	$1 50	1 00	50
No. 153.	Red Dutch, one quart, three premiums	1 50	1 00	50
No. 154.	White Dutch, one quart, three premiums	1 50	1 00	50
No. 155.	White Grape, one quart, three premiums	1 50	1 00	50
No. 156.	Any other variety, gratuities.			

RASPBERRIES.—

No. 157.	Brincklé's Orange, one quart, three premiums	$1 50	1 00	50
No. 158.	Clarke, one quart, three premiums	1 50	1 00	50
No. 159.	Franconia, one quart, three premiums	1 50	1 00	50
No. 160.	Hornét, one quart, three premiums	1 50	1 00	50
No. 161.	Hudson River Antwerp, one quart, three premiums	1 50	1 00	50
No. 162.	Northumberland, one quart, three premiums	1 50	1 00	50
No. 163.	Turner, one quart, three premiums	1 50	1 00	50

No. 164.	Cuthbert, one quart, three premiums	$1 50	1 00	50
No. 165.	Herstine, one quart, three premiums	1 50	1 00	50
No. 166.	Any other variety, gratuities.			

BLACKCAPS.—

No. 167.	Gregg, one quart, three premiums	$1 50	1 00	50
No. 168.	Mammoth Cluster, one quart, three premiums	1 50	1 00	50

VEGETABLES.—

No. 169.	Beets, twelve Egyptian Turnip-rooted, two premiums		$2 00	1 00
No. 170.	Potatoes, one-half peck, Early Rose, two premiums		2 00	1 00
No. 171.	Peas, one-half peck, two premiums		2 00	1 00

Thursday, July 19.

SALPIGLOSSIS.—

No. 172.	For the best stand, two premiums		$2 00	1 00

GERMAN STOCKS.—

No. 173.	For the best stand, two premiums		$2 00	1 00

GLOXINIA,—in Pots.—

No. 174.	Six varieties in bloom, three premiums	$3 00	2 00	1 00

LILIUM.—

No. 175.	Vase, two premiums		$2 00	1 00

CUT FLOWERS,—distinct varieties.—

No. 176.	Stand of (named) three premiums	$3 00	2 00	1 00

RASPBERRIES.—

No. 177. Any variety, one quart, gratuities.

BLACKBERRIES.—

No. 178.	Kittatinny, one quart, three premiums	$1 50	1 00	50
No. 179.	Snyder, one quart, three premiums	1 50	1 00	50
No. 180.	Wachusett, one quart, three premiums	1 50	1 00	50
No. 181.	Any other variety, gratuities.			

VEGETABLES.—

No. 182.	Potatoes, Beauty of Hebron, one-half peck, two premiums	$1 50	1 00
No. 183.	Beans, Early Valentine, two premiums	1 50	1 00

Thursday, July 26.

FLOWERS,—seedlings of 1883.—

No. 184.	Stand, three premiums	$3 00	2 00	1 00

BASKET.—

No. 185.	Round, flat, twelve inch, three premiums	$3 00	2 00	1 00

PETUNIAS.—

No. 186.	Stand, three premiums	$3 00	2 00	1 00

PEARS.—

No. 187.	Doyenné d'Eté, twelve, three premiums	$1 50	1 00	50

VEGETABLES.—

No. 188.	Squashes, Four Summer Crookneck, two premiums.	$1 00	50
No. 189.	Four Scallop, two premiums	1 00	50

TOMATOES.—

No. 190.	Twelve, of any named variety, two premiums	$1 50	1 00

Thursday, August 2.

CUT FLOWERS,—GROWN FROM SEED.—

No. 191. Stand of distinct varieties, three premiums $3 00 2 00 1 00

BOUQUET,—PARLOR.—

No 192. Twelve inches from base to tip, three premiums $3 00 2 00 1 00

PHLOX DRUMMONDI.—

No. 193. Stand of best varieties, three premiums $3 00 2 00 1 00

APPLES.—

No. 194. Any variety, twelve, gratuities.

PEARS.—

No. 195. Beurré Giffard, twelve, two premiums $1 50 1 00

VEGETABLES.—

No. 196. CABBAGE, three, Jersey Wakefield, two premiums..... $1 50 1 00

No. 197. CORN (Sweet), twelve ears, two premiums $1 50 1 00

Thursday, August 9.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 198. Twenty blooms, or clusters, two premiums $2 00 1 00

GLADIOLUS.—

No. 199. Eighteen named varieties, one spike each, four premiums, $4 00 3 00 2 00 1 00

VERBENAS.—

No. 200. Stand, best varieties, three premiums $3 00 2 00 1 00

APPLES.—

No. 201. Astrachan (Red), twelve, three premiums $1 50 1 00 50

PEARS.—

No. 202.	Beurré Giffard, twelve, two premiums	$1 50	1 00	

GOOSEBERRIES.—

No. 203.	Downing's Seedling, one quart, two premiums	$1 00		50
No. 204.	Any other variety, one quart, two premiums	1 00		50

VEGETABLES.—

No. 205.	CABBAGE, Winnigstadt, three specimens, two premiums	$1 50	1 00	
No. 206.	CORN, Crosby, twelve ears, two premiums	1 50	1 00	
No. 207.	POTATOES, Early Ohio, one-half peck, two premiums	1 50	1 00	
No. 208.	SQUASH, Marrow, four specimens, two premiums	1 50	1 00	
No. 209.	TOMATOES, Acme, thirteen specimens	1 50	1 00	

Thursday, August 16.

ANTIRRHINUM,—SNAP DRAGON.—

No. 210.	Stand, best varieties, three premiums	$3 00	2 00	1 00

LILIUM.—

No. 211.	Six varieties, three premiums	$3 00	2 00	1 00

PINKS,—(ALL KINDS.)—

No. 212.	Stand, three premiums	$3 00	2 00	1 00

IRIS KÆMPFERI.—

No. 213.	Best display, three premiums	$3 00	2 00	1 00

APPLES.—

No. 214.	Astrachan (Red), twelve, three premiums	$1 50	1 00	50
No. 215.	Early Harvest, twelve, three premiums	1 50	1 00	50

PEARS.—

No. 216.	Beurré de l'Assomption, twelve, three premiums	$1 50	1 00	50
No. 217.	Clapp's Favorite, twelve, three premiums	1 50	1 00	50
No. 218.	Dearborn's Seedling, twelve, three premiums	1 50	1 00	50

PEACHES.—

No. 219.	Alexander, twelve, three premiums	$1 50	1 00	50
No. 220.	Beatrice, twelve, three premiums	1 50	1 00	50

VEGETABLES.—

No. 221.	Beans (shell), Concord, half-peck, in pod, two premiums		$1 50	1 00
No. 222.	Tomatoes, Emery, twelve, two premiums		1 50	1 00
No. 223.	Livingston's Perfection, twelve, two premiums		1 50	1 00

Thursday, August 23.

ASTERS.—

No. 224.	Rose, eighteen, two premiums		$1 00	50
No. 225.	Hedgehog, eighteen, two premiums		1 00	50
No. 226.	Cocardeau (Crown), eighteen, two premiums		1 00	50
No. 227.	Victoria, eighteen, two premiums		1 00	50
No. 228.	Boltzés, must be shown in the whole plant, two premiums		2 00	1 00

ASTERS,—(Pompon.)—

No. 229.	Stand, three in a bottle, three premiums	$3 00	2 00	1 00

GLADIOLUS,—(distinct varieties.)—

No. 230.	Eighteen, 1 spike each, three premiums	$4 00	3 00	2 00

DAHLIAS,—(distinct varieties.)—

No. 231.	Eighteen, three premiums	$3 00	2 00	1 00

APPLES.—

No. 232.	Sweet Bough, twelve, three premiums	$1 50	1 00	50
No. 233.	Duchess of Oldenburg, twelve, three premiums	1 50	1 00	50

PEARS.—

No. 234.	Clapp's Favorite, twelve, three premiums	$1 50	1 00	50
No. 235.	Rostiezer, twelve, three premiums,	1 50	1 00	50
No. 236.	Tyson, twelve, three premiums	1 50	1 00	50

PEACHES.—

No. 237.	Hale (Early), twelve, three premiums	$1 50	1 00	50
No. 238.	Rivers (Early), twelve, three premiums	1 50	1 00	50

PLUMS.—

No. 239.	Any variety, twelve, two premiums		1 00	50

VEGETABLES.—

No. 240.	SQUASH, Turban, three specimens, two premiums		$1 50	1 00
No. 241.	TOMATOES, Paragon, twelve specimens, two premiums		1 50	1 00

Thursday, August 30.

CUT FLOWERS,—(DISTINCT VARIETIES.)—

No. 242.	Stand, three premiums	$3 00	2 00	1 00

DELPHINIUM.—

No. 243.	Stand, best varieties, three premiums	$3 00	2 00	1 00

GERANIUMS,—(DISTINCT VARIETIES.)—

No. 244.	Stand, three premiums	$3 00	2 00	1 00

GLADIOLUS,—(NO DUPLICATES.)—

No. 245.	Display, three premiums	$3 00	2 00	1 00

SWEET PEA.—

No. 246.	One stand, best variety, not more than twelve blooms in one bottle, three premiums	$3 00	2 00	1 00

APPLES.—

No. 247.	Williams's Red, twelve, two premiums		1 00	50

PEARS.—

No. 248.	Clapp's Favorite, twelve, two premiums		$1 50	1 00
No. 249.	Any other variety, twelve, gratuities.			

PEACHES.—

No. 250.	Cooledge, twelve, two premiums.		$1 00	50
No. 251.	George Fourth, twelve, two premiums		1 00	50

VEGETABLES.—

BEANS,—(HALF-PECK IN POD.)—

No. 252.	Horticultural, two premiums		1 50	1 00
No. 253.	Lima (large) two premiums		1 50	1 00

Thursday, September 6.

BALSAM,—GROWN IN POTS.—

No. 254.	Six plants in bloom, three premiums	$3 00	2 00	1 00

LILIUM JAPONICUM.—

No. 255.	Best display, three premiums	$3 00	2 00	1 00

PHLOX,—PERENNIAL.—

No. 256.	Stand, three premiums	$3 00	2 00	1 00

SCABIOSA.—

No. 257.	Stand, best variety, three premiums	$3 00	2 00	1 00

ZINNIA.—

No. 258.	Stand, at least twelve varieties, two premiums		$2 00	1 00

MARIGOLD.—

No. 259	Stand, two premiums.....		$2 00	1 00

APPLES.—

No. 260.	Williams's Red, twelve, two premiums		$1 00	50
No. 261.	Sweet Bough, two premiums....		1 00	50
No. 262.	Worcester Spy, two premiums...		1 00	50

APPLES,—(Crab.)—

No. 263.	Transcendent, 24, three premiums	$1 50	1 00	50

PEARS.—

No. 264.	Ansault, twelve, three premiums.	$1 50	1 00	50
No. 265.	Bartlett, twelve, three premiums.	1 50	1 00	50
No. 266.	Belle Lucrative, twelve, three premiums.....	1 50	1 00	50
No. 267.	Earle's Bergamot, twelve, three premiums.....	1 50	1 00	50
No. 268.	St. Ghislain, twelve, three premiums.....	1 50	1 00	50

PEACHES.—

No. 269.	Crawford (Early), twelve, two premiums		$1 00	50
No. 270.	Foster, two premiums.....		1 00	50

PLUMS.—

No. 271.	Bradshaw, twelve, two premiums.		$1 00	50
No. 272.	Coe's Golden Drop, twelve, two premiums.....		1 00	50
No. 273.	General Hand, twelve, two premiums		1 00	50
No. 274.	Imperial Gage, twelve, two premiums		1 00	50
No. 275.	Jefferson, twelve, two premiums.		1 00	50
No. 276.	Lombard, twelve, two premiums.		1 00	50
No. 277.	Washington, twelve, two premiums		1 00	50

VEGETABLES,—four varieties, viz.,—

No. 278.	Beans, half-peck.....	Three premiums.		
No. 279.	Corn (Sweet), twelve ears.....			
No. 280.	Potatoes, half-peck.....	$3 00	2 00	1 00
No. 281.	Squash, three specimens.....			

Thursday, September 13.

BOUQUET—(PARLOR.)—

No. 282. Best, loosely arranged, three premiums $3 00 2 00 1 00

DAHLIA.—

No. 283. Stand, best variety, three premiums $3 00 2 00 1 00

NASTURTIUM AND TROPŒOLUM,—(STAND.)—

No. 284. Best varieties, not more than twelve blooms in each bottle, three premiums..... $3 00 2 00 1 00

APPLES.—

No. 285. Foundling, twelve, two premiums. $1 00 50
No. 286. Golden Sweet, two premiums.... 1 00 50
No. 287. Gravenstein, four premiums..2 00 1 50 1 00 50

PEARS.—

No. 288. Bartlett, twelve, four premiums. $2 00 1 50 1 00 50

PEACHES.—

No. 289. Crawford (Early), twelve, two premiums $1 00 50
No. 290. Oldmixon, two premiums..... 1 00 50

MELONS.—

No. 291. Yellow Flesh, three specimens, two premiums $1 00 50
No. 292. Green Flesh, three, two premiums 1 00 50
No. 293. Watermelons (2), two premiums. 1 00 50

VEGETABLES.—

No. 294. CUCUMBERS, half-peck (for pickles), two premiums $1 50 1 00
No. 295. PEPPERS, twelve best, two premiums 1 00 50

Thursday, September 20.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 296.	Twenty blooms or clusters, three premiums	$3 00	2 00	1 00

NATIVE FLOWERS,—NAMED VARIETIES.—

No. 297.	Stand, three premiums	$3 00	2 00	1 00

PANSIES,—WITH FOLIAGE.—

No. 298.	Stand, three spikes in each bottle, three premiums	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 299.	Combination, three premiums	$3 00	2 00	1 00

APPLES.—

No. 300.	Codlin (Dutch), twelve, two premiums		$1 50	1 00
No. 301.	Porter, three premiums	1 50	1 00	50
No. 302.	Pumpkin Sweet, two premiums		1 50	1 00

APPLES—(CRAB).—

No. 303.	Hyslop, 24, two premiums		$1 00	50

PEARS.—

No. 304.	Doyenné Boussoc, twelve, two premiums		$1 00	50
No. 305.	Durandeau, three premiums	1 50	1 00	50
No. 306.	Merriam, two premiums		1 00	50
No. 307.	Paradis d'Automne, three premiums	1 50	1 00	50
No. 308.	Seckel, three premiums	1 50	1 00	50
No. 309.	Any other variety, two premiums		1 00	50

GRAPES.—

No. 310.	Moore (Early), three clusters, two premiums		$1 00	50
No. 311.	Lady, three clusters, two premiums		1 00	50
No. 312.	Lindley, two premiums		1 00	50
No. 313.	Prentiss, three clusters, two premiums		1 00	50

No. 314.	Worden, three clusters, two premiums		$1 00	50
No. 315.	Brighton, three clusters, two premiums		1 00	50

PEACHES.—

No. 316.	Crawford (Late), twelve, two premiums		$1 00	50
No. 317.	Stump the World, two premiums.		1 00	50
No. 318.	Any-other variety, two premiums		1 00	50
No. 319.	New Seedling—originated in Worcester County—three premiums	1 50	1 00	50

Thursday, September 27.

ASTERS.—

No. 320.	Stand, three premiums	$3 00	2 00	1 00

BASKET—CUT FLOWERS.—

No. 321.	Best, 12 inch, with handle, on stand, three premiums	$3 00	2 00	1 00

CUT FLOWERS—STAND.—

No. 322.	Three premiums	$3 00	2 00	1 00

APPLES.—

No. 323.	Gravenstein, three premiums	$1 50	1 00	50
No. 324.	Holden Pippin, twelve, three premiums	1 50	1 00	50
No. 325.	Lyscom, three premiums	1 50	1 00	50
No. 326.	Twenty Ounce, three premiums	1 50	1 00	50

PEARS.—

No. 327.	Beurré Hardy, twelve, three premiums	$1 50	1 00	50
No. 328.	Beurré Superfin, three premiums.	1 50	1 00	50

No. 329.	Louise Bonne de Jersey, three premiums	$1 50	1 00	50
No. 330.	Seckel, three premiums	1 50	1 00	50
No. 331.	St. Michel Archange, two premiums		1 00	50
No. 332.	Washington, two premiums		1 00	50

PEACHES.—

No. 333. Any variety, twelve, gratuities.

GRAPES.—

No. 334.	Concord, three clusters, two premiums		$1 00	50
No. 335.	Delaware, two premiums		1 00	50
No. 336.	Duchesse, two premiums		1 00	50
No. 337.	Pocklington, two premiums		1 00	50
No. 338.	Any other variety, gratuities.			

VEGETABLES,—FOUR VARIETIES, VIZ:—

No. 339.	ONIONS, half-peck	Three premiums,		
No. 340.	POTATOES, half-peck			
No. 341.	SALSIFY, twelve specimens	$2 00	1 50	1 00
No. 342.	SQUASH, Cocoanut, six specimens			
No. 343.	CAULIFLOWER, three specimens, two premiums		1 50	1 00

Thursday, October 4.

BASKET—(CUT FLOWERS).—

No. 344.	Twelve-inch, flat, oval, three premiums	$3 00	2 00	1 00

STAND—(CUT FLOWERS.)—

No. 345.	Three premiums	$3 00	2 00	1 00

APPLES.—

No. 346.	Garden Royal, twelve, two premiums		$1 00	50
No. 347.	Maiden's Blush, two premiums		1 00	50

No. 348.	Washington Strawberry, two premiums			$1 00	50
No. 349.	Any other variety, gratuities.				

PEARS.—

No. 350.	Beurré Bosc, twelve, four premiums	$2 00	1 50	1 00	50
No. 351.	Dr. Reeder, three premiums		1 50	1 00	50
No. 352.	Sheldon, four premiums	2 00	1 50	1 00	50
No. 353.	Any other variety, gratuities.				

GRAPES,—OPEN CULTURE.—

No. 354.	Any variety, three clusters, gratuities.				

QUINCES.—

No. 355.	Champion, twelve, three premiums	$1 50		1 00	50
No. 356.	Orange, twelve, three premiums	1 50		1 00	50

VEGETABLES.—

No. 357.	POTATOES.—Six varieties (named), half-peck each, three premiums	$2 00		1 50	1 00
No. 358.	SQUASH, Hubbard, three, three premiums	1 50		1 00	50

Thursday, October 11.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 359.	Stand, three premiums	$3 00		2 00	1 00

FLOWERS AND FRUIT.—

No. 360.	Combination, three premiums	$3 00		2 00	1 00

APPLES.—

No. 361.	Canada Red (Old Nonesuch), three premiums	$1 50		1 00	50
No. 362.	Baldwin, three premiums	1 50		1 00	50

No. 363.	King of Tompkins County, three premiums	$1 50	1 00	50
No. 364.	Leicester Sweet, three premiums	1 50	1 00	50
No. 365.	Any other variety (named), gratuities.			

PEARS.—

No. 366.	Dix, twelve, three premiums	$1 50	1 00	50
No. 367.	Duchesse, three premiums	1 50	1 00	50
No. 368.	Marie Louise, three premiums	1 50	1 00	50
No. 369.	Onondaga, three premiums	1 50	1 00	50

GRAPES,—OPEN CULTURE.—

No. 370.	Any variety, three clusters, three premiums	$1 50	1 00	50

QUINCES.—

No. 371.	Any variety (named), twelve, three premiums	$3 00	2 00	1 00

VEGETABLES.—

No. 372.	CELERIAC, five specimens, two premiums		$1 50	1 00
No. 373.	Kohl, Rabi, five specimens, two premiums		1 50	1 00

Thursday, October 18.

CUT FLOWERS.—(BOUQUET.)—

No. 374.	Style, flat, mantle, size not to exceed twelve inches from base to tip, three premiums	3 00	2 00	1 00

CUT FLOWERS.—(STAND).

No. 375.	Three premiums	$3 00	2 00	1 00

APPLES.—

No. 376.	McClellan, twelve, three premiums	$1 50	1 00	50

No. 377.	Sutton Beauty, three premiums..	$1 50	1 00	50
No. 378.	R. I. Greening, three premiums .	1 50	1 00	50
No. 379.	Any other variety (named), gratuities.			

PEARS.—

No. 380.	Beurré d'Anjou, twelve, four premiums.....	$2 00	1 50	1 00	50
No. 381.	Beurré Diel, two premiums		1 00	50
No. 382.	Doyenné du Comice, four premiums	$2 00	1 50	1 00	50
No. 383.	Urbaniste, three premiums.....	1 50	1 00	50

VEGETABLES.—

No. 384.	Best Collection, grown from seed that was itself raised by the competitors, three premiums ..	$3 00	2 00	1 00

Thursday, October 25.

CHRYSANTHEMUM.—

No. 385.	Stand, three premiums.....	$3 00	2 00	1 00
No. 386.	Six plants in bloom, three premiums.....	3 00	2 00	1 00

FERN—(parlor).

No. 387.	Best plant, three premiums	$2 00	1 00	50

PALM—(parlor).—

No. 388.	Limited to two feet in height, three premiums	$2 00	1 00	50

GARDEN—(window.)

No. 389.	Three premiums	$4 00	3 00	2 00

APPLES.—

No. 390.	Hubbardston Nonesuch, three premiums	$1 50	1 00	50

No. 391.	Mother, three premiums.....	$1 50	1 00	50
No. 392.	Northern Spy, three premiums,..	1 50	1 00	50
No. 393.	Roxbury Russet, three premiums	1 50	1 00	50
No. 394.	Yellow Belle Flower, three premiums.....	1 50	1 00	50

PEARS.—

No. 395.	Beurré Clairgeau, two premiums.		$1 00	50
No. 396.	Beurré Langelier, three premiums.....	1 50	1 00	50
No. 397.	Dana's Hovey, two premiums ..		1 00	50
No. 398.	Duchesse d'Angoulême, three premiums	1 50	1 00	50
No. 399.	Glout Morceau, three premiums .	1 50	1 00	50
No. 400.	Josephine de Malines, three premiums	1 50	1 00	50
No. 401.	Lawrence, three premiums.....	1 50	1 00	50
No. 402.	Mount Vernon, two premiums...		1 00	50
No. 403.	Winter Nelis, four premiums....	2 00	1 50	1 00	50

VEGETABLES.—

No. 404.	Collection of Novelties, five varieties, three premiums	$2 00	1 50	1 00
No. 405.	Best Collection of Seeds of Garden Vegetables, grown by competitors, three premiums ..	3 00	2 00	1 00

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FOR THE YEAR 1882-3.

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OF THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1883.

COMPRISING

THE

ANNUAL REPORTS OF THE SECRETARY,

AND OF THE

LIBRARIAN.

Worcester, Mass.
PRESS OF CHAS. HAMILTON,
311 MAIN STREET.
1884.

WORCESTER COUNTY
HORTICULTURAL SOCIETY.
A. D. 1883.

ANNUAL REPORT OF THE SECRETARY.

To the Members of the

Worcester County Horticultural Society.

At the recent session of the American Pomological Society, a paper was read, by the President of the Michigan State Horticultural Society, upon the following thesis:—

"How can we best maintain a high standard of Quality in Fruits, as against the tendencies of Commercial Pomology?"

In plain terms,—How—to "advance the Science, and encourage and improve the practice of Horticulture," can we most profoundly sink the shop? A precisely similar conundrum was propounded, nineteen centuries since, in ancient Judea: What business have the Brokers and Stock-Gamblers properly in the Temple;—so near the unguarded Ark of the Covenant? The remedy then and there applied, might be deemed too summary, in these days of perfunctory police and vicarious virtue. But the problem confronts us, just as forcibly: And it is one of which the consideration cannot longer be delayed or avoided.

Quite lately, the *Country Gentleman* published the replies of some "eminent fruit-growers" to an inquiry by that veteran Pomologist, John J. Thomas, for their choice of the *Three*, and also of the *Six*, "most valuable Strawberries and Raspberries." The answers are restricted within a somewhat narrow latitude,

although extending from New Jersey to the Mississippi River. But, almost without exception, do they relate the experience of market-growers;—nursery-men producing, upon a large scale, the plants,—in a majority of cases, the fruit also. No intelligence, applicable to this extreme section of the Republic, can be winnowed from that raw heap of confidence. No one wrote from *Clay-shire:* and to New England, this side of Connecticut, that geological, and almost geographical, expression, betrays all. Said the late *Dr.* Brincklé to the writer, well-nigh thirty years agone; as they stood together in that famous back-yard between Chestnut *Street*, above Thirteenth, and Girard *Row;* we can originate, but we cannot guaranty, growth in our soil. Vividly can the writer recall that narrow space;—through which one had to thread his way between pots of seedling Raspberries; ducking his head underneath the clothes-line that could not be denied to inexorable household necessity; and then those three Pear stocks along the brick party-wall, whose least limb had been crowded with vigorous grafts by the untiring *Doctor*, to accelerate bearing; and in the fortunate test of which,—their comparative, or absolute, hardiness, fecundity, or quality, his entire interest seemed to be reserved. Since his time we have had Raspberries; and—again Raspberries! the puzzle being sometimes of difficult solution where the rasp ended and the berry commenced. But what other Pomologist, throughout this broad Republic, can indicate a seedling originated by himself; of permanent value; or which deserves to be named in the same day with the delicious Orange, of that overworked physician?

"Forsan et hæc olim meminisse juvabit."

And therein must be sought the milk of this particular cocoa-nut;—the solution of the problem in hand. Brincklé's *Orange* ranks easily first among all known Raspberries, in the points of fecundity, beauty, and flavor. But it was never discovered by Arctic explorers in their searches after the Polynia. Indeed, its most ardent advocates are free to admit that it actually requires protection throughout a Massachusetts Winter; although not more than a Potato during a Massachusetts Summer. And yet with this sole drawback; common as it is to every species of the

Rubus *Idœus*, and inseparable from them as it will be found; not one of the Pomologists addressed by *Mr.* Thomas even so much as referred to the existence of that unequalled and pre-eminent variety. Neither is there a solitary mention of Fastolf, Franconia, Knevett's Giant, Hornét; nor even of the Northumberland Fillbasket,—whose late offspring—Baumforth's Seedling,—holds out such luscious and encouraging promise. Of the varieties that have found approval among the critical growers of this established Society; the Cuthbert alone receives commendation. Although a defect is alleged, curious enough to those who have seen it in Worcester, in its "rather dark color"! But with this solitary exception, not a single first-class Raspberry is mentioned by those "eminent fruit-growers", whose judgment was solicited. You read of Souhegan, and Gregg; of Ohio, and Tyler; of Hopkins, and Mammoth Cluster; and realize that the whole pother has been, after all, only about Thimble-berries!

Perhaps this is the aspect of the question, as viewed by the market-grower, and huckster. But how is it presented to the members of a Society which exists for the explicit and declared purpose of "advancing the science, and encouraging and improving the Practice of Horticulture"? An indiscriminate mention of Raspberries by their generic name; no distinction, save by title, which only informs experts already instructed, of the Rubus *Idœus* from the opposite species *Occidentalis.* And then the accidental, hap-hazard election; for the public which would grow its own stock; of a little better berry than is found by every road-side, over that which is a feast to set before Presidents! For, bear in mind, always,—that of all these countless varieties of Rubus *Occidentalis*—(Thimbleberry), not one is put forward, because a seedling! That, on the contrary, all are recommended because their original and obvious superiority to others growing wild had been observed and appreciated. Were the art of man traceable! could you refer to deliberate semination, and subsequent fruition, by any one; could you, in short, point to the origin of one new and valuable variety of the *Occidentalis*, through assiduous experiment, care, and cultivation, as you can to that of the Brincklé's *Orange;* then indeed, might the spirit of mortal be proud. But, it was found in a pasture,—

somewhat better than its fellows. It was extracted from a stone-wall; and, with higher cultivation, the fool of Nature is surprised at the subsequent increase in fecundity and quality. The Glacier first; and the Cyclone, which the *Occidentalis* unfortunately has always with it; can deracinate and transplant. But foresight, assiduity, and perseverance, must be taken into our account with the election and eclecticism of species: nor can any of them be omitted with safety, from the calculation, if you would ensure the survival of the fittest. Here and there a Raspberry is advocated because of superior hardiness. Now let it be repeated here, as always in these Reports, that there was never yet a variety of the species *Idœus* that could endure the winters of Massachusetts, uninjured. Nature may be circumvented: open defiance is never successful. It is not meant to deny that, now and then, a variety may have survived a season of average frost, to all appearance, without immediate injury. Such has been the experience of the writer with the Philadelphia, which is not worth cultivating: and to the like effect is the testimony of members of this Society, concerning the more valuable Clarke, Cuthbert, or Franconia. But the contention is, that it is a risk;—one which no grower can afford to take. The canes may live without protection: the chances are ninety-nine (99) to one (1) that they will be killed outright, or rendered worthless. The constitution of the plant is enfeebled by exposure to harsh climatic vicissitudes; and it falls into a gradual decline, furthered by the stimulating manure supplied to arrest it, and accelerated by the unnatural crop that it is thereby forced to yield. You may be told plausible tales of what this or that grower has done, who leaves his Raspberry canes erect and uncovered. But you would do well to reserve full faith and credit; unless you are of those fatuous fools who repose blind faith in the audacious liars! whose pedigree is deep in the blood of Ananias and Sapphira: who are rioters in the get of ancestry; and whose fancy stock is endowed with the miraculous power of doubling or trebling its own weight, annually, by simply passing it, in solution, through a bag! Well was it said that faith might remove mountains. Yet,—ever since, while the stint con-

tinues the same; no hill starts from its base:—only now, as always, fools and their money are soon parted.

And so with STRAWBERRIES! Of the "growers" catechised by the *Country Gentleman*, all knew what would "*best suit the market*"! Evidently they have proved, partially at least, all things. Would that they had likewise held fast to that which is good. The *Charles Downing* gets a pretty fair word from most; although even such acceptance is qualified by objections to this, that, or the other alleged defect. Besides the Downing, every other variety named is some novel introduction;—not to be rejected, of course, for that reason; but certainly not for novelty alone to be commended for indiscriminate adoption.

Now delicious Strawberries were grown in the Town of Worcester, when your *Secretary* was young enough to slide down over the present location of Chestnut, and Elm, *Streets;* or to skate upon ice, in Winter, before rollers were devised by the Arch-Enemy! Strawberries of superior flavor, and of ample size, have been known and shown at the Exhibition of this Society, in every Summer of its existence. Where are those approved varieties, now? If lost to cultivation, what have you substituted in their place? Which of the countless sorts that are advertised; each Spring, or Autumn; stands the searching test of time and trial as did the *Hovey;* the *Jenny Lind; Downer*, *Jucunda*, or *Triomphe de Gand?* If perchance you obtain a good berry, now and then, how much better off are you, as you find the novel acquisition secured by the sacrifice of something precious already in possession? It has been otherwise put: "For what shall it profit a man if he shall gain the whole world, and lose his own soul?"

A Horticultural Society that would be true to itself;—more especially one, like our own, whose path is directly indicated as a condition of its legal existence; must guard against every insidious tendency to perversion. The market may be left to its own devices. Those who sell and get gain, can usually perceive what will enure to their personal advantage. But the true Horticulturist requires, and means to have, something better from his garden, or orchard, than the Wilson, Philadelphia, Baldwin, or Bartlett. He has developed latent possibilities; and rejoices

in the discovery and wide-spread dissemination of the Triomphe de Gand, and Charles Downing; of the Fillbasket, Cuthbert, and Brincklé's *Orange;* Earle's *Bergamot*, Doyenné du Comice, or Beurré d' Anjou; or, and emphatically, those noblest of all fruits,—the Gravenstein, and Northern Spy. We cannot, as a Society, adopt the advice to plant the Bartlett; and thereafter, some more Bartletts; and yet again—the Bartlett! Our standard is—excellence; and we strive to originate, introduce, and—should I not emphasize it? perpetuate the best.

But,—you "relax your grip"! Why? A new berry is offered,—of perhaps superior size, if only of average quality, which was grown under favoring conditions: and the customary passion for change does the rest. The significant fact is overlooked that all soils are not alike; that extreme care and assiduity were devoted to the production of the novelty; and that geese are not indeed and cannot by any means be transformed into swans. The new variety is new,—and must therefore be had. Yet space is limited; and the old and approved favorites must be up-rooted and thrown away. A short trial may detect inherent defects, or utter worthlessness; but, when the scales have fallen from your eyes, old things have passed away; and the sole vision left is of rows, or mats, of plants that betray an absolute and entire waste of labor, time and money. You have gratified your fancy; but lost your fruit with the tried variety which you will find it impossible to replace. How often has one of our most skilful members declared to your *Secretary* that he would again grow the *Triomphe de Gand*, could he but depend upon getting the plants pure!

But one infallible rule can be suggested for your guidance. Grow that which best suits your own exposure and soil; never forgetting that the alternations, within the limits of a single town or city, from clay to sand, or from heat to cold, or from drought to saturation, are often extreme. Nor,—that when you have contrived to suit yourself, at least one person will be pleased! Trust those who purvey for the market to detect the tendency toward sirloin, or shin-bone!

Unless a stubborn resistance is opposed to this commercial spirit, so aggressive in its manifestations; Horticulture will be

liable to serious infection from our latest national idiocy:—the cant and rot of Pedigree. The old dung-hill fowl is worthless,—since she only lays eggs and is not bred to a feather! The old Nancys and Mollies of the barn-yard are good for nothing, for they yield naught but milk and butter! They are not developed to the latter-day perfection, whereby the animal is made to confound the old rule of the gambler that—"the more you put down, the less you take up!" And thus it will inevitably result with Pomology, except it is kept sedulously in mind that what is new is not, for that reason, necessarily better than the old. That the Market may be, usually is, ignorant of what is best; yet is apt to learn. And finally, that a Horticultural Society, occupying the watch-tower, is so posted, to sound the alarm when the mischief becomes apparent: or when evil advice or wrong tendencies threaten to subvert its better influences; and corrupt or pervert the public judgment.

Curious advice is often given to those who, in their inexperience, would fain be directed how best to grow a particular fruit. Thus,—with reference to the CURRANT;—a writer in a leading journal does not quite ignore the fact that the bush, and not the tree-trunk, is the natural and only proper form in which to develop that most excellent summer fruit—the common English distortion to the contrary, notwithstanding. But he goes on to say: "if the bushes have raised, so that the roots can be seen above ground, whatever the method of trimming may be, the best way is to set new bushes." Which is exceeding nonsense. In the experience of a life-time, your *Secretary* has found no occasion for setting new bushes, unless a larger plantation became desirable. He has the same, now, that he had when the Currant worm first commenced the work of defoliation; and their yield, A. D. 1883, attracted general attention. Usually, too many canes, or stalks, are suffered to remain; six good strong ones are enough. And they will be much more thrifty than a larger number; while the peril to the stalk from borers is diminished in just the proportion that it is dispersed. Of course, severe pruning, or thinning out, is implied; and the root-growth is apt to become excessive. But the regular use of a long spade remedies all trouble from any such cause: the excision beneath

the surface corresponding to the amputation above. When withdrawing the spade, any man of ordinary skill can easily transpose the earth so that the roots will be sufficiently buried. If you would take the trouble, however, to lift and re-set each bush; and you will be surprised to find how quickly, and at what slight cost of labor, it can be done; you would be amply repaid. Shortening in of the side shoots is a wise measure; as greater rigidity is thus confirmed in the main stems, enabling them to bear up under their augmented burden of products. English customs of cultivation should find as little tolerance, or imitation, in our climate and with our torrid suns, as does the English love for the Black Currant,—so utterly distasteful and even repulsive to the Yankee palate. The Currant-bush, it is true, yields its grateful fruit throughout the fervent heats of Summer: but its wood appreciates shade, as well as does that of the Cherry; either of them cracking, scalding, or exuding their very life-sap, when too openly exposed and hotly scorched. And,—most essential,—do not be stingy of stable manure! Use night-soil whenever you can without offence: resting confident in the actual experience of those who have tried it, that nothing else is so efficacious, or productive of such ample returns.

And thus,—without fibre or pith,—is a major part of the mental food wherefore we are made to pay roundly. The Sunday newspaper, with its conflicting hash of politics and theology; with its *tête exaltê* and feet of miry clay; occasionally?—slops over! And, in lieu of now, my beloved brethren! we enter upon seventeenthly! startles the tired reader with such concentrated bathos, as the subjoined:—

"The born aristocrat believes in blood, and after all, in the true sense, it is the blood that we want. The leaves of the English Elms, on Boston Common, are as fresh to-day as they were in June: while the American Elms are dry and withered already* with the drought. The one has been forever invigorated by English fogs and has got the habit of vitality in its texture. The other has grace and beauty, but is weak in the struggle for existence. This illustrates the present weakness of American life. The demand for strength and force was never so great; the forces which are behind strong men and women were never so weak, and are growing weaker every day."

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* September 22d, A. D. 1883.

Great Pan is dead! but Diana of the Effusions shall live and be worshipped for ever! Be the reign of flapdoodle eternal! Yet, in such wise, we—Horticulturists, Pomologists, Grangers! or simple *Terræculturists*, innocent even of Initiation! the name matters not so long as you can smell the Mari-gold! are reduced for development to pedigree, after all!

Vanished forever from the view of the Pomologist is Van Mons, with his theory! Worse than idle is the counsel of Marshall P. Wilder: and ultimate perfection from hybridization, or cross-fertilization, might as well be dismissed for the idle dream of senility. Pedigree!

"The blood of bulls and of goats; and the ashes of a heifer sprinkling the unclean;"

are elevated upon the pedestal: and that which was before incense, and an offering of adoration, is transformed into the very God.

"The leaves of the English Elms on Boston Common are as fresh, to-day, as they were in June."

Score one for the *Sangré Azul!* But the English Oaks, on *Elm Park*, in Worcester, are as dead as the Georges,—if more fragrant in decay: while their American congeners, in the same bleak exposure, open wide their arms in defiance of Boreas and the gale. Likewise the immigrant, if filled with vital force, survives to multiply and replenish the land. The inspiration,—"on his native heath,"—may have been English Fog, or Mountain Dew! but the clear and exhilarating skies of America would quickly dissipate either. Insist upon sound stocks! to commence withal. Resist disease and repel parasites!—to continue. Put faith in wholesome nutrition! allowing the health-giving current free circulation and tolerating neither impediment nor dam in the veins or arteries: and your Elms, as your Oaks; whether discovered in the primeval forest by Miles Standish and Edward Winslow; or imported, as saplings, by Brian Boroighme; will alike grow up to become standards of stateliness and strength;—rioting in vigorous life; and tossing their wealth of foliage to a sunshine and breeze that laugh to mockery an "English Fog." Hercules may have been the son of Jupiter and Alcmena; and

nobly did he achieve the labors imposed upon him. Yet,—so long as Antæus could touch his Mother Earth, he remained invincible. Therefore, know a good thing when you see it! And freeze, or warm, to it, in proportion to your sense, and according to your appreciation, of its merits,—should it turn out bloodless as a Turnip!

There is an aphorism,—old as Man,—Go away from home, if you would learn what has happened at your own door! In an English journal, that lies upon our tables, may be found a whole page of extracts from an American contemporary that are stuffed to repletion with the most extravagant praise of the Kieffer Pear. After contrasting it with the Lawrence, and other approved varieties, to their invariable and immense disadvantage; the writer mounts his high horse, and careers as follows:—

"Kieffers also found customers in Massachusetts, as several bushels grown in Burlington County, N. J., were shipped to Worcester, Mass., and although delayed a week by an accident on the railroad, they sold readily on arrival at $6.00 per bushel, the same as in Philadelphia."

I think that this will be news to you, and doubt if the statement could be verified. Have any of you been able to find a ready sale, at Six Dollars per bushel! for any Pear,—no matter what the variety? Can you obtain that price, even now, when fruit is comparatively scarce, for the Comice, or d' Anjou? Or have you ever known the time when so much was offered for the Bartlett, or Clapp? Such exaggeration may delude the ignorant, and serve to disperse a worthless novelty among those who receive, for gospel, anything that is in print. But, when it gains currency and sanction, by its republication in a journal of deserved repute, in another country; it is high time that its gross falsehood were detected and denounced.

The Kieffer Pear has been shown, at our Exhibitions, by our veteran associate from West Boylston. Its external appearance, which is decidedly in its favor, was by far the best part of it. The writer, first quoted, says that "it does not rot until very ripe, and remains firm at the core to the last." Specimens given to your *Secretary*, for trial, did not ripen until wholly rotten; when, the flesh being worthless, the condition of the core was of

little moment. This, of course, was a trial upon a small scale; and, as one swallow does not make a Summer, a single failure may not condemn a variety. But the trial was made in good faith; and its results are better worth acceptance than the wholesale invention which fabricates, or distorts, to suit a personal interest. When the scripture reads,—"My advice to the young fruit-grower is, to plant what pays best!"—its apostle will scarcely found a new dispensation.

In this same epistle to rural New Yorkers, we find that the scribe had

"planted and tried to grow the Orange, Hornêt, and other choice varieties of Raspberries, but could make no profit from them here; while ten acres of Brandywines,—dry, firm berries, not of best quality for table use—yielded one season 26,300 quarts which carried well, looked well and sold for $4,340, and, after deducting all expenses, left a nett profit of $2,800, an average of $280 per acre."

Shades of Coomassie and Jersey Belle of Scituate! In vain

"You coin your hearts,
And drop your blood for drachmas;"

There can be tricks taken in Horticulture, worth all your vaunted pedigree.

Our scribe does not think much of the Seckel; for it does not put money in his purse! He prefers to grow the Wild-Goose Plum, which partially resists the Curculio, rather than the "Jefferson, Coe's Golden Drop, or the Washington;—Plums of the first quality," to secure which he would have to exert himself!—somewhat of a hardship to a sluggard.

Against all such counsels a Horticultural Society should set its face like a flint. Individual members may go astray, or be misled, in their hungry hankering after the flesh-pots: but the pathway of the organization is blazed, broad and clear, through garden and orchard. Follow not after Baal, who may be asleep or gone a journey; build no altars to the unknown God! You may feed on quails and manna, or worship a Golden Calf, in the wilderness. But it is only when you espy the Land of Promise, in near perspective, that you can "come unto the brook of Eshcol, and cut down from thence a branch with one cluster of

Grapes" which it will require two to "bear upon a staff," bringing also "pomegranates and figs."

It is possible, with exceeding credulity, to believe that Architecture may be "frozen music." Yet, as among the devotees of the tuneful muse, harmony is usually the one thing lacking,—so it is evident that the mere process of congelation could not give it birth. "*Ex nihilo, nihil fit.*" Hence the discords that everywhere arrest attention are not surprising: startling us, by the apparition, in the same narrow landscape, of formations after the Springfield mania; the "Queen Anne" conceit; the Gothic savagery; or the delicate Grecian fancy. Built to lease, or to sell, they may last throughout our brief period: and is not the true philosophy,—*Aprés moi, le deluge!* Thus built,—as it were for a shelter-tent; why should the occupant care for those adornments wherewith he might otherwise surround himself, but that are wholly unsuited to the card-"house that Jack built." By and by,—as population increases, and settlement closes in upon itself; the enjoyment of even the smallest space of ground becomes impossible: and they who would fain cherish some favorite flower, or fruit, are reduced to the closest straits. Whether a remedy for such wants is practicable; whether it shall be provided under a more thorough method of construction, in this our own day and generation; may involve a waste of time to consider. But, that "they do these things better in France," has been an accepted proverb for many long years. And how they are done, in at least one instance, I translate, for your information and enjoyment, from the *Revue Horticole*:—

"There are few persons who have never heard mention of the famed Hanging Gardens, of Babylon, attributed to Semiramis: or who have never read the marvellous account of them handed down by tradition.

"Savants,—simple scholars even, have doubted if it were possible to create those gardens. That they are wrong, we may well believe; for where is the impossibility, when one can dispose of all power; and the forces and resources of an entire People are controlled by a single will? Setting aside exaggeration,—it is permitted us to believe that such gardens once existed. Besides,—who has not known examples,—at least upon a small scale?

"What are these terraces?—these balconies that are in sight, everywhere? whereon flowering plants are grown, if not hanging gardens

after a fashion peculiar to themselves! Yet more: those mansards, in whose garrets the working-girl cultivates at her casement; often at a mere dormer-window; some plant that she has bought, or the '*Volubilis*,' of which she sowed the seeds! So much the less can it be called a matter of money. That alone will not suffice. Something else than wealth is essential. Love! love,—without which nothing can be accomplished; but with which, on the other hand, all things are possible, and which has caused the saying,—'Though I should have the gift of miracles, and though I should speak all tongues, it would be useless if I had not Charity—in other words—Love.'

"Very well, that Love! we have known in Paris a man who possessed it, and who, upon the fifth story, well-nigh sixty feet from the ground, has created a veritable Garden. This man is *M.* Lockroy, senior; who indeed has always been fond of plants. He cultivated the earth as long as he could; and until his garden, in the Rue du Roche, had been taken to build streets: then, still loving those whom he called 'his children,' he commenced, at No. 32 Washington *Street*, a garden in the air. But here again he distinguishes himself; and, instead of limiting his efforts to the growth of a few climbing plants for the purpose of shade; he has invented as it were, and created what probably exists nowhere else:—an actual fruit garden—a sort of Orchard. And there is just where you may see what can be done when one is influenced by the love, or passionate desire, for a thing. Note the facts! Upon a terrace almost twenty (20) metres long by at least two (2) wide; strengthened towards the street by an iron railing; *M.* Lockroy has placed boxes in which the pots containing his Pears are completely buried. It would be useless to add that the soil is a suitable compost, thoroughly assimilated."

The writer, *Mons.* E. A. Carriére, adds that *M.* Lockroy permits no one but himself to touch his trees, and goes on to state that:—

"The number of varieties grown by *M.* Lockroy, is eighteen: of which none seem to find the manner of cultivation unsuitable. While he has had among them the Doyenné d'Hiver, and other varieties that generally spot, there are never defective fruits in that Ærial Garden on Washington *Street*, thanks to the use of nicotine which *M.* Lockroy sprinkles freely. Perhaps there is a lesson in this, whose application may well be wider.

"Although Pear culture receives the most attention, *M.* Lockroy has demonstrated that his manner of cultivation is adapted to other things, as well. For, besides Currants, and Gooseberries, he grows Roses with very great success: and we can testify that the vigor and health of his bushes as well as the beauty of the flowers leave nothing to be desired. Let us add, to explain this result, that *M.* Lockroy is a passionate amateur in Rose-culture; and that, in the era of Laffay, Vibert, Verdier, and Levéque,—*seniors*,—his knowledge, in all that relates to this genus, had already constituted him a teacher."

You are not challenged to imitation, or rivalry, under our American system of construction. The balloon-frame; with its super-structure of mansard, or pitched roof; does not invite the extra load that *M.* Lockroy so fearlessly imposes. What may be possible, in a remote future; when the average Yankee shall build for all time, and thereafter and because of it become his own insurer; is a pleasant speculation. That we could not build much worse may be confidently assumed. That we shall improve, rather than retrograde, may be boldly predicated by all who reflect that climate is inexorable; and that the hard and slovenly discomfort of Anne's shiftless reign might as well be revived, as the

"quips, and cranks, and wanton wiles,"

of erection, or finish which, with the faintest semblance of reason, are latterly charged to her example.

The founders of this Society builded no wiser than they knew. Thoroughly versed in the Horticultural Science of their own times, they never doubted;— sagacious and busy men of the world as they were, and had always approved themselves; that much remained to be discovered beyond their immediate ken. They rambled in the fields, which almost encroached upon Main *Street;* they roamed through the shaded walks in the garden of William Lincoln, stretching, in its ample and complete extent, from the Hermitage *Brook* almost to the present Rural Cemetery; and whatsoever they found by brook-side; (for the Salisbury *Pond* was not then even fancied as a possible want;) or in the ever present grove; they gathered, analyzed, and explained, without money or price, to an abounding and continually larger audience. And it was for such reasons:— because they fully recognized an existing necessity; because they saw that the Agricultural Society had enough to demand and occupy its attention, unless it elected to bite off a larger cud than it could chew; and for the additional reason, becoming stronger as Worcester should increase in population and extend its habitations, that the farm and orchard must inevitably be pushed farther, and yet more remote, from the Town Hall; that those clear-sighted, large-hearted and public-spirited men — ANTHONY CHASE, CLARENDON HARRIS, FREDERIC WILLIAM PAINE, WILLIAM LINCOLN, and STEPHEN SALISBURY

associated themselves, with the declared "purpose of advancing the science and encouraging and improving the Practice of Horticulture."

Through Autumnal Exhibitions; and elaborate Reports by expert Committees; either of them maintained, or perfected, at untold cost of time and devoted labor; those men and their successors (for, alas! few of the patriarchs survive), confirmed and permanently established this WORCESTER COUNTY HORTICULTURAL SOCIETY. And the question which is now suggested, by events occurring around us, is—have we been true to the trust transmitted to us? which we voluntarily assumed! We hold Exhibitions, it is true, as in the infancy of the corporation; and there is an unfailing and ample display of exquisite Flowers and Fruits, each in their season. We offer pecuniary encouragement for the introduction of new varieties of merit: and our tables supply satisfactory evidence that the lure was not ineffective in its temptation. Once, at least, we instituted a course of Botanical Lectures, by an acknowledged Master of the Science: and contrived to keep our Hall about one-third full, by a profuse distribution of tickets, *gratis*, among those who would not otherwise attend. Perhaps we were too easily discouraged. But the blood of the martyrs offers slight promise of grateful nutrition; and few care to supply it, in their own persons, as an original package.

Nevertheless, others have commenced where we left off. The school of the prophets is re-opened; and the Botanical Lecture is seconded and supplemented by the Botanical Class. Another Society does this;—taking up our appropriate task;—making it a labor of love;—and persevering where we wearied and fell faint by the way-side. Without any assured endowment; without any permanent fund, wherefrom to draw at will; with no Scientific Library for reference, belonging to it; it has gone on,—modestly,—enthusiastically,—effectively;—until, at last, it offers, complete and ready for publication a full, descriptive, FLORA *of Worcester County.* Alas! that it should be my ill fortune to announce such a work begun and consummated, under other auspices than our own! For ourselves have been the premiums—the ready cash! For those other assiduous students

the present richly earned credit;— the undying renown of actual, solid achievement.

Still, without petty jealousy, it may be our high privilege to foster and support. It has occurred to your *Secretary* that a subscription for a generous number of copies of that work would be a creditable act; and that those copies might well be kept for award as gratuities throughout the Floral Exhibitions of the ensuing year.

And, again: to promote our own declared aims; as well as to assist those of similar tastes who are groping, as it were, in the dark; I would most earnestly recommend that the use of our Library, under such restrictions as may be deemed indispensable, be proffered to any and all students of Botany that shall be accredited to us by the officers of the Natural History Society. Labor, time, and money, are often needlessly wasted, in the effort to found Libraries devoted to some especial branch of science; when all that is essential had been long since accumulated in those larger collections of books that are established upon a wider basis. Liberality in this particular, will enure to our own ultimate benefit. The botanical student of to-day will become the florist and exhibitor of to-morrow. The talent, put out at interest, will yield returns, scarcely to be computed: and that which is now almost a dead investment upon our shelves, loaned out, circulated, and consulted, shall broaden and strengthen the foundation upon which this Society must build its faith of perpetual vitality and usefulness.

The better way of displaying Flowers, at an Exhibition, has never been reduced to one precise, unvarying Rule. The Basket, or Vase may adorn; the Design,— heaven save the mark! bewilder or perplex. The average, uncultivated taste appears to incline toward the massing system; those aggregations, by whatsoever name, that blend and sink all individuality, whether of genera or species. But the incoming tide is irresistible. The single Dahlia is in the ascendant; and the bedding mania has ceased to cloud the popular judgment. And, after all,— why should there be any doubt? As a Horticultural Society, you aim at perfection. If achievement is your avowed object,— you must favor the production of specimen flowers. To determine if

they are perfect,—should they not be shown separately, if possible: at all events, with as little bunching as consists with due arrangement? Take, for example, the Hollyhock! What! or how much can a solitary flower disclose of the manner of growth; the vigor of stalk; or the general character and style of the entire plant? Our schedule, A. D. 1883, called for the "best display;" the "best 12 distinct colors;" the "best 6 distinct colors." Those 12, or 6, colors, like so many kernels of corn upon the ear, may be indicative;—yet of what? Let him declare who has learned the lesson, if any, which they have to teach! But what lessons can you learn from a detached bloom of the Hollyhock,—more than from one of the Gladiolus,—which you would laugh to see? Yet the cases are exactly similar; and any distinction is without a palpable difference. Should not the whole spike of the Hollyhock be required for exhibition? Even John Bull is of that advanced opinion; for, in "The Garden"* "T. H. B." is complimented, yet advised, as follows:—

"Hollyhocks.—(T. H. B.) The flowers you send are good, particularly the dark crimson sort, which is one of the finest of its color. In order to judge Hollyhocks properly, however, the full spikes must be seen."

We have much to learn;—somewhat to forget, or discard. But where there exists a willingness to be taught; a perfect schedule may be hoped for, sooner or later, if not completely attained.

Strawberries were shown, the past season for the first time, flat,—as the term is: or, arranged upon a dish, in a single layer. The experiment was entirely successful, and gave equal satisfaction to competitors and the Judge. Every thing was at once apparent, but flavor; the presence, or lack of that being of the easiest determination. No time was wasted in vague speculation whether the quart, so handsomely "deaconed," was honest: defects or deceit becoming obvious at a glance. It has proved the most decided advance that has been taken, for years, in our manner of displaying the smaller fruits. And we may the better incline to look favorably upon any other suggestion that will promise to facilitate, or simplify, what is sufficiently difficult and

* The Garden (London, Eng.), Aug. 4, p. 104.

tedious, at best,—the task of rendering an entirely impartial and just award. For our signal measure of success, hitherto, let us be grateful!

Seedling Peaches, for which you offer a Standing Premium, have not been shown in as much variety as of old. Specimens from *Mrs.* Henry Lovell, of North Ashland *Street*, in the City of Worcester, attracted the close attention of our faithful Judge; whose original scepticism was finally set at rest. The similarity of species, much more of varieties, is so strong, that the sharpest and most conscientious observation will frequently prove inadequate to the detection of a counterfeit. Imposition is however continually attempted: and it is for the vital interest of Pomologists everywhere, that discovery and exposure should be immediate and summary. In all these cases of uncertain nomenclature, or doubtful origin; the judgment of your *Secretary* is confirmed, as to the value of a capable and honest judge; who makes awards by the best lights at his command; and who does not hesitate to follow and dissipate that treacherous beacon—the *ignis fatuus* of each new competitor, which indicates that what we most want we ought surely to have. The science of Peach-growing; how much more of Plums! is largely that of Paradise Lost. In the good time coming,—whereof Riley is the probable Prophet,—we shall exchange chance for certainty; trade with West Boylston, and Grafton, rather than Delaware; and, reveling in flavor, feel renewed assurance that the proof of each pudding must be in its eating, whatsoever may have been its pedigree!

At the last Annual Meeting of your TRUSTEES, a proposition to create a separate Vegetable Department, with its exclusive and peculiar Committee, failed to secure your approval. At the same time, the first step towards its establishment was taken, by the addition of a specific sum to the General Appropriation, to be applied, as stated, to increase the awards for Vegetables. That money could not have been expended more wisely. To be sure,—if sent to Borriaboola Gha it might have lent its volume to swell the current of Lost River; and possibly, on its return, "after many days," aided in gaining your exemption from taxation, as a new school of theology. But this Horticultural Society

was founded with an honest purpose; has never sought immunity from what should be a common burden, through false pretences; and so now stands upright before this community, bearing the unequal load imposed upon it; owing no man anything that it cannot pay upon demand! Despite an unpropitious season, you have stimulated the growth of Sweet Corn, the Tomato, the Squash; and above all Celery;—to a development whereof the public reap a common benefit. I do not mention Cauliflowers: reserving them as the particular spoil of my own bow and quiver; recalling how often, in days of yore, the lonely hours of an Annual Autumnal Exhibition were occupied in impressing upon my assistant, that the market would absorb whatsoever Mountain *Street* might be made to yield; and feeling especial self-complacency over the manifest fact that neither the sermon, nor its application to the immediate audience, were wasted.

A separate Vegetable Department will be indispensable, before long; if for no other reason, to relieve the judge of Fruits from what will have become an onerous, and somewhat incongruous, duty. At present,—it appears to your *Secretary* better to let well alone: awaiting development, expecting change, and holding ourselves in readiness to accept whatever is new that may approve itself as an advancement upon the old.

In the Spring-time of this Society, when everything was fair with promise; when there was no fund from which to pay premiums, and therefore (?) few cared for them; a Committee was appointed, to devise a *Diploma* of appropriate design and careful execution. There is no record that anything was accomplished. But, does not the need exist? The First-Class Certificates, so-called; awarded by the Royal Horticultural Society of England; are prized beyond measure by their fortunate recipients. Should not this Society extend some recognition of especial merit, in origination; propagation, if you choose; or even rare skill and success of cultivation? The money premium does not represent an equally solid value to all. A meritorious distinction; rigidly guarded, and bestowed solely upon and for desert; would be an object of emulation; and, when secured, become prized and valuable, in proportion to the difficulty of its

attainment. The Centennial Diplomas that adorn our walls attest but partially the renown which attached to your standing as a Society, A. D. 1876. All of those Diplomas should find their congenial and proper home within this hall. A Century hence,—they will supply a point of departure; a method of estimating the progress towards perfection of that Pomological Evolution which started, as its germ, from the *Bosc* and *Comice* of the present day. Let this Society, also, award its Certificates, or Diplomas; yet only as they may be earned, and with a caution that shall be extreme in its parsimony!

A Florist, of wide repute; whose presence at our Exhibitions is in inverse ratio to the warmth of his welcome; who has often placed upon our tables collections of those superb Roses for which he is so deservedly famous; and to whom, still more frequently, we have been indebted for excellent and timely cultural counsel; asks your *Secretary* why our limit of competition is restricted to the County of Worcester? Why the Florists, and Pomologists of the State, are not invited to compete, as freely as they are at Boston, by the Massachusetts Society! He did not imagine that there would be many to avail themselves of such a privilege: "but," added he, "if a crowd, your Society need not fear!" Years ago,— we imposed no such restriction of residence; and it is my individual recollection that no disastrous results followed. On the contrary, it was our occasional felicity to be favored with a display, which, from its intrinsic beauty and the instruction it afforded, richly merited the award that it obtained as it were by unanimous acclaim. What have we gained by our infinitesimal Chinese wall? How much better now might we challenge, or endure, competition, when our members go down upon deliberate forays and return laden with the spoil of the Egyptians! Possibly, it is not a matter of essential moment; but, as an evidence of magnanimity, it could not hurt the collective Society; while, to individuals, wholesome opportunities of observation and comparison, otherwise unavailable, might now and then be presented. Other corporate bodies throw their doors wide open. The managers of the Musical Festival scour the wide world for fresh and acceptable talent. The young and flourishing Rifle Club hold a Tournament; bright precursor of an inter-

minable succession to follow, each more popular and prosperous in their order; and the Disinherited, or Black Knight, are alike welcome within the lists. Our local Agricultural Society broods beneath the wing of the pretentious New England organization; and for years past literally

Stetit nominis umbrâ.

Why should we hesitate, or what shall we apprehend?

Your latest Exhibition, on the 25th ult., became the happy culmination of a successful season. The Hall of Pomona was filled with a collection of fruit and vegetables that burdened the tables; and the space, not thus appropriated, was thronged by an ever-changing, continually-renewing audience. Fruit was in its season, and at its prime; Beurré d'Anjou, Glout Morceau, and Winter Nelis, not being invited in September, as formerly: while the Hubbardston Nonesuch, and Roxbury Russet, had attained their full autumnal development,— whereof the latest month is the most essential to complete maturation. If Flowers failed,— or were inferior; it need not be forgotten that their glory was in the milder days of Summer; nor that, from May to September, there was not a week that was without its attraction,—or surpassing charm. Be thankful that, years ago, you had the prescience to anticipate, and provide for, a possible future! Exult! not as the Pharisee, but with an earnest pride, that you did not listen to the timid caution which shrinks from the first step; cowardly awaiting the initiative by others; but that, instead, you became pioneers of an advanced Horticulture,— blazing, clear and wide, a new and straight path through the wilderness of indecision and untried experiment. Would you know how other Societies, of approved repute, yet linger in the desert, groping blindly for the way that is so bright to us! The lesson might be learned in Boston: but I prefer to take you across the Atlantic:

"Royal Horticultural Society:— It must not be overlooked, that the great disasters which have befallen the Society have arisen mainly from the attempts that have been made to attract the non-horticultural public. The further the Society has departed from its original programme, the worse it has fared. The large exhibitions, even, whatever may once have been the case, are now, as a rule, not only not

remunerative,—that is, they do not attract the general public in number sufficient to make them pay; but they are of very little real value to horticulturists as compared with the committee meetings. By abandoning in part, at least, the Great Show, one source of expense will be materially lessened; while by improving and enhancing the interest of the committee meetings,* the Fellows at large would get as much or more for their subscriptions than they now do.

"Chiswick, and the committees, in fact, should be the main things to which the energy of the Society should be devoted.

"The duties of local committees or local secretaries should be, to communicate at intervals to the parent Society information as to local horticulture;—as what peculiar systems of culture are adopted; or what varieties of Apple, Pear, Potato, or what not, do best in the particular locality:—in fact, to act as scouts for the parent Society; which, in return, should keep the provinces *au courant* with what is done in London, and, by the medium of Chiswick, distribute such grafts, seeds, or plants, of new or improved kinds, as could fairly be distributed without interfering with legitimate trade."†

The Nineteenth Bi-ennial Session of the American Pomological Society was duly held, in Philadelphia, during the second week of September, last. The dates usually selected for those Sessions are about as untimely as they could well be for Massachusetts: especially since it was determined to invite a simultaneous display, from all parts of the Republic, of their favorite fruits. September is the month wherein, from time immemorial, our Harvest shows are appointed: and the question must necessarily be forced upon us, biennially, whether of two things, each eminently desirable, shall be preferred. Such election is difficult, perhaps invidious; and its necessity might well be obviated. At any rate, it would seem that the latitude, of the locality chosen, shall be considered, whenever a *Pomological Exhibition* is invited: in which event, the same week would not hold good for Massachusetts, Georgia, Illinois, or Pennsylvania.

I have suggested, heretofore, that it might not be presumptuous for a Society, so firmly established as our own, to contemplate a session of the Pomological Society here, in Worcester. We could accustom ourselves to the idea; and, if not in the immediate future, perhaps common consent might

* Fairly equivalent to our own Weekly Exhibitions. [E. W. L.]

† Gardener's Chronicle, Feby. 10, 1883.

concede to us the occasion of the Fiftieth Anniversary of our Incorporation. A. D. 1892, is quite distant: and doubtless the writer, with a moiety of this audience, may be cultivating Eclectic Strawberries; or inhaling eternal and celestial fragrance, from the Blue Roses of Jerusalem, the Golden. The alternative, not being even a plausible supposition, is not taken into the account. That Lower Region, surcharged as it is with theological sulphurets; exempt as it must be from mildew and every form of fungoid growth; can be no perennial habitation or home for the true Horticulturist,—all whose labors are exerted in the promotion of a better and happier life. Rather, let it be reserved for the Church-Member, who deliberately withholds from Cæsar the things that are indisputably his own! Somewhat also for the Civic Assessor! who descries, in a sub-lease to the Pitcher and Catcher; not seldom to the lusty Stallion and his professional server; that degree of Education or Science, wherein, it must be admitted,—the Florist and Pomologist are signally, or sexually, at fault. But the members of this Society, a decade hence; enjoying freedom from debt, and possessing adequate means; may well wish to show their choice Library and the complete, as unincumbered, structure which is their Horticultural home; to their fellows of congenial pursuits and tastes throughout the Republic. No one need feel shame, save for his own fault or negligence, should your prospective guests obtain a furtive, if no better, view of Worcester and its suburbs—polished gems in its coronal of rural beauty.

For it may as well be understood,—being above and beyond denial; that this Society is no—poor pussy!—needing to have its fur stroked smoothly; does not exist by patronage; is grateful for honest and hearty appreciation; and peremptorily declines to be relegated to a second, or inferior rank. In many respects, it falls short of its avowed aims: it does not always seek so much to increase and diffuse a knowledge of scientific and practical Horticulture, as to put money in its individual purse. Yet,—when all is admitted in derogation, this fact presents itself, salient and actual: that this organization of ours is throbbing with healthy blood; that its vitality is unimpaired, old age maintaining its clutch; and youth, of either sex, acquiring a

fresher and more tenacious hold. Whatsoever you choose to make of this Society, within the coming decade,—that, be sure it will become, as an instrumentality for good or ill.

You may knuckle to cool assumption! surrender precedence to brazen pretension! or, continuing in the even tenor of your way, so conduct your affairs, that, when the time is at hand to celebrate your Golden Wedding to Horticultural Science and Practice; there shall be none to withhold due laud and reverence. For such a consummation have many labored already, achieving the toilsome ascent of Pisgah, yet realizing that the Land of Promise, stretching out in far perspective, was not for their enjoyment, or possession. To that end may we devote ourselves,—assured that no toil can be fruitless which is inspired by the love of humanity: and that all labor, free from the taint of personal interest, will earn and insure its own reward, in proportion to its abnegation of self.

Our delegation was small in number, if not restricted as to size. "*Tempora mutantur!*";—as my "*captatores verborum*" intimate, heretofore suggested in these Reports. It was not a pilgrimage to Boston,—to your next-door neighbor: nor could due representation dovetail with household shopping. But this lack of adequate attendance, liable to become more significant as distance extends, impresses upon me still more forcibly the duty of advising a remedy. Should not this Society recognize it as an inevitable obligation to be represented at each recurring Session of the American Pomological Society? Should it not take all proper means to ensure that its representation shall be effective? It cannot always command the gratuitous service of members who will defray their own expenses. It has no reason to expect such service to be volunteered; and it should have too high a regard for Horticulture,—whether as a Science or Practice,—to be willing to accept such proffer if tendered. That we should be represented, commends itself as eminently fit. That we should be represented by competent men, is, of course, your unanimous judgment. That the common treasure should support the common burden, must be admitted by you, upon reflection;—needing no argument. And, therefore, I do not hesitate to advise that the travelling expenses of our delegate to Phila-

delphia, A. D. 1883, be re-imbursed; and that this Society adopt a settled policy of representation, within sharply defined limits, at all future meetings of Societies of cognate pursuits.

A subject, of especial interest to all Pomologists, was set forth with great earnestness by the venerable *President* of the AMERICAN POMOLOGICAL SOCIETY, in his Annual Address:—

"Our Society has been foremost in the field of Reform in this work ('the establishment of short, plain, and proper rules, to govern the nomenclature and description of our fruits),' but there is much yet to be done. We should have a system of rules consistent with our Science, regulated by common sense, and which shall avoid ostentatious, indecorous, inappropriate and superfluous names. Let us have no more Generals, Colonels, or Captains, attached to the names of our fruits; no more Presidents, Governors or titled dignitaries; no more Monarchs, Kings, or Princes, no more Mammoths, Giants, or Tom Thumbs; no more Nonsuches, Seek-no furthers, Ne plus ultras, Hog-pens, Sheep-noses, Big Bobs, Iron Clads, Legal Tenders, Sucker States, or Stump-the-Worlds. Let us have no more long, unpronounceable, irrelevant, high-flown, bombastic names to our fruits, and, if possible, let us dispense with the now confused terms of Belle, Beurré, Calebasse, Doyenné, Pearmain, Pippin, Seedling, Beauty, Favorite, and other like useless and improper titles to our fruits. The cases are very few where a single word will not form a better name for a fruit than two or more. Thus shall we establish a standard worthy of imitation by other nations, and I suggest that we ask the coöperation of all pomological and horticultural societies, in this and foreign countries, in carrying out this important reform."*

You will doubtless recollect the rigorous contention of your *Secretary* that the new Belgian Pear might better be named Ansault, than Bonne du Puits d'Ansault! That sensible abbreviation found ready and general assent. A reform, like the one outlined by *Col.* Wilder (as a matter of nomenclature, it might be asked if he takes exception to his own martial title!) may well command universal acceptance. How far it can be carried is another question. Bosc, and Comice, are intelligible; without the usual prefix of *Beurré* or *Doyenné*. But the Northern Spy, and the Worcester Spy, although handsome and of high quality, are entirely different; and we may well be in suspense which is meant under the proposed dispensation, when either is brought up for trial. At present,—you would stump the world with your

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* See Appendix A.

Peach,—in the nature of a defiance to produce a better! But how is your pride brought low, when some blockhead,—fresh from a logging camp, imagines that you have been felling the round world, at its base, and are preparing to realize upon its stumpage.

Your co-operation in facilitating a reform in this matter of confused nomenclature, will be readily accorded. But let us be sure, first, that it is a real amendment! and not, simply, a change that shall go to swell an already overgrown dictionary of synonymes. Why is not *Nonesuch* descriptive, and also distinctive?

At the second day's session, an Essay was read by *Professor* C. V. Riley, the justly celebrated Entomologist, entitled "Recent Advances in Horticultural Entomology." In the course of his remarks, the learned *Professor* alluded to many new and interesting discoveries respecting the best means for the destruction of the pests of the pomologist; and exhibited apparatus for the proper distribution of various insecticides. He recommended

"an emulsion of kerosene and sour milk, in the proportion of two (2) parts of the oil to one (1) of the milk. The mixture should be thoroughly churned; after which the compound, thus formed, will not resolve itself into its elements, no matter how long a time it is kept. Mixed with about twenty (20) times its bulk of water, and dispersed, in a fine spray, over the bark and foliage of trees, it will destroy the insects that are so injurious to our fruit and shade trees."

Professor Riley was heard with close attention; and, when he had concluded, the Society tendered him a unanimous vote of thanks. The use of Kerosene, as an Insecticide, has been the subject of more or less successful experiment, in England, for some years past. The trouble, hitherto, has been, to retain the oil in permanent suspense: a mere solution of the oil with water, quickly resolving into its component parts. If the formula of *Professor* Riley proves effective, upon trial; and its simplicity is greatly in its favor; there will be no excuse; may we not trust —no toleration! for that sloth and slovenliness which suffers defoliation and spoil from canker-worms, codling-moth or curculio, because of the labor involved in checking their ravages. The proposed remedy, or rather method of prevention, is the cheapest possible; the privilege of playing from a garden engine

would have been considered fun, when the writer was a boy; and were the operation dubbed mischief, boys of like tendencies might be discovered, at this late day. So much, at least, is certain; we must conquer our Insect-Foes, or be conquered by them. All remedies or methods of preservation, hitherto suggested, have failed upon trial: usually for the reason that their application exacted an amount of toil, and expense, wholly out of proportion to the benefit actually experienced. Possibly the practice devised by *Dr.* Hull, of guarding the Plum from the Curculio, by the jarring system, should be excepted from this sweeping condemnation. Yet, few people care for Plums, when they can get Apples, or Pears: so that the formula of *Professor* Riley comes none too soon to supply an admitted want. A sure yield from the Cherry-tree may also be expected; since the loathsome swarms of Aphides ought to succumb readily to the oily deluge. The newspaper report leaves it in doubt whether the solution can be used, without injury, upon Plants,—notably, the Rose: but precise experiment can determine what reduction, or further dilution, may be necessary, if any.

Some of our members,—"male and female created He them!" have striven at times, with varying success, to ascertain into what queer and unnatural shapes flowers could be perverted, or distorted. All such may like to know that the Pennsylvania Horticultural Society maintained its just pre-eminence; and that its Floral Designs were, as in days of old, fearfully and wonderfully made. There was, for example, a "Bridge Over Jordan!" the customary access to it, that hard road to travel,—being wrought by a lively imagination. Philadelphia has ever been a godly city, as was manifested by her burnt offering of churches, some forty years ago: and, even now, in the process of evolution, she is nothing, if not pious. So that you will not be surprised to learn, after passing Jordan, that "the entire centre of the platform" of Horticultural Hall, "was occupied by a Floral Chancel." The local reporter gushes over its "elaborate design?" and becomes fairly enraptured with "its fine regard for harmony of colors." To his charmed eye, rolling in a fine floral frenzy, is "represented the sides and back of the chancel; a reading-desk

with an open Bible on it; an arm-chair in red roses; and an elaborate carpet, as a ground work for the whole." "It is said," —note his caution! "that the Dahlias in it (the carpet?) number more than 4,000;" and he naively opines that "there are rather more of every other flower than of Dahlias!" Alas! that it should be left for your *Secretary*, at this distance, to detect a fatal omission. The "counterfeit presentment" of the Rector! Under what envious eclipse were hidden the moon-like features of the *Reverend* Cream Cheese!

The period is not so very remote,—within the vigorous manhood of your Father and mine, Mr. President! when the Town and Parish were co-terminous and, as it were, identical; when every descendant from Adam became, whether of his own volition, or from compulsion by the tithingman, a regular attendant upon public worship; and necessarily, as inexorably, a child of grace; and when the Meeting-House, for the Lord's Day, was also held in common and legitimate use, by the whole people, at the Election on the last Wednesday in May. But a single creed, or protest, term it which you will! being tolerated; since orthodoxy is my doxy, you know! there could be no dissent to be made an object of invidious discrimination. A man was taxed,—whether or no; and the density of his faith, the extravagance of his heresy, or even the rank insolence of his atheism, availed nothing to secure immunity.

But we have changed all that,—as they say in France: and now enjoy our one gravy and forty-five religions*! Is there not a grim sarcasm in the practical operation of the law, that would foster and disseminate a faith about which scarcely two men think alike? Foster, and spread it broadcast, not at their cost by whom it is cherished; but at the expense of schismatics; and by the imposition of burdens grievous to be borne, upon property consecrated to such beneficent purposes as is this—our Hall of Horticulture! It is a difficult matter to redress a wrong, when the only possible remedy involves the relinquishment, by others, of a pecuniary advantage. Nevertheless, the right is sure to

* The Worcester City Directory, for the current year, recites the titles of Forty-Five (45) distinct religious societies; and "the cry is—still, they come!"

prevail, in the long run. And we have but to persevere, to win relief from an invidious and illegal discrimination against Horticulture; or to overthrow the entire fabric of injustice which, already top-heavy, has no other support than the "miry clay" of sectarian or doctrinal, exemption from a burden that should be borne by all, as it enures to the common welfare.

The levy upon your property, A. D. 1882, amounted to the sum of $838.00; A. D. 1883, $877.20: are exacted from you in order, as the Constitution of Massachusetts puts it,—

"to cherish the interests of Literature and the Sciences, &c., to encourage private societies and public institutions, rewards, and immunities, for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and a natural history of the country," &c., &c.

At the same time, the Assessors recognize, as entitled to exemption from Taxation for the support of a Fire Department; the Police; or Government generally; under the following classification:—

	Real Estate.	Personal.
Literary Institutions	$301,700	$69,500
Benevolent " } Charitable " }	32,300	3,000
Scientific "	136,500	40,000
Houses of Worship	1,478,700	
Agricultural Societies	76,600	
	$2,022,800	$112,500
* Total		$2,135,300

Although published in the plural, there is but one Agricultural Society, so-called; as you are well aware. And that, besides immunity for its valuable tract of land, is in the annual receipt of a Bounty from the State that nearly equals the sum extorted from us!

You will observe the description by the Assessors:—Literary; Benevolent; Charitable; Scientific; Devotional; Agricultural! What then are we, if none of these! You have read of "a man without a country." You have heard of Mahommed's coffin miraculously poised betwixt Heaven and earth. But were you

* A. D. 1882: the valuation of property exempted was $2,046,600.

ever told of the preter-natural experience of that forlorn ghost, who, applied, after death, for admission within the Pearly Gates. St. Peter knew him not and "sent him over"—as they term it at the Police Court. There also he was not wanted: a political convention was in session, and every cot was occupied. Yet, perplexed by his remonstrances; and perceiving their force; Lucifer at last relented. "Our rules are copied from those of the Medes and Persians," said he, "and are inflexible! but I will do what I can. Take this roll of brimstone, and start a little hell of your own!"

We are not "literary"; we are not "benevolent"; nor "scientific"; nor *devotional;* nor even "agricultural"! Still, could we but become beneficiaries of infernal magnanimity; obtaining some of that sulphur—at least, its flowers; we might possibly secure our Grapes from mildew, for ultimate valuation as products of the garden or orchard; even if we did not save our corporate bacon from the assessors.*

As I have heretofore reminded you,—the Statutes relating to "Houses of Religious Worship" enact that

"portions of such houses appropriated for purposes other than religious worship, shall be taxed at the value thereof to the owners of the houses."

What was the amount taxed upon the "Church Vestry" of Wholesale Salvation, in Pleasant *Street*, A. D. 1883, in which was advertised, for successive evenings, the "very best of Turkey Suppers, 35 cts.!" "Each evening the Pied Piper of Hamlin, and his Army of Rats! in a series of Illustrated Tableaux." Wherein also the elect are informed that,—"At a great expense, Madame Le Blache has been engaged to introduce her famous Gallery of Beauty." "Admission 10, and 15 cents. Supper from 6 to 8."

We cross the Street to Puritan Chapel, "crowded to its utmost capacity" as the report has it, by an audience that listened to "The Deacon's Story," sandwiched as it were between a vocal solo,—"What will you do, Love?" and the Poet-Laureate's idealization of the Adulteress!

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* See Appendix "B" for Statement, in detail, of Property (Real and Personal) exempted. E. W. L.

Let us remain in this *Chapel*, for awhile, "inviting our souls to loaf," after a style scarce possible elsewhere; at anything like the same price, and—exemption! General admission 25 cts., Reserved seats, 35 cts. "Pour out thy heart before the Lord!" sang the tenor: and when the congregation insisted that he should continue pouring,—out of the fulness of that heart the mouth spake:—"Annie Laurie"!

Two evenings later, for fifty cents, in that same School of the Profits,—you could hear, in Greek, all about the "Killing of Laius," from a play compounded in equal parts of Incest and Parricide: or bow your head in the devout meditation, befitting the place and occasion," as you thought of "Uncle Micajah Treat at Slambasket Beach!"

And yet once more in this Sanctuary! for that is about the scent of it;—Upon this occasion, a maid sings of "Love's Heaven"; while a quartette blend "mixed voices" in "My heart and hand are thine!" Thereupon ensues a curious concatenation. First comes "A Wine Song"; followed by "Above, in her chamber"; when "The Two Grenadiers" succumb to "A Night in Venice." It did not cost much; and the reporter pronounces it "a musical and financial success."

And now, leaving this patch of holy ground, we will resume our shoes; simply adding that, upon a subsequent occasion, doubtless replete with grace,—"the comic pictures of Frank Lawrence pleased the people"!

Proceeding South and reaching the *Church* of the Pious Immersion, if a child, in possession of a quarter-dollar, you may enjoy the blessed privilege of listening to the "Famous Tennesseeans, Jubilee Singers, and Colored Concert Company, in one of their Weird and thrilling Concerts. Miss Pinkie Johnson, the Great Shouting Soprano," will make you wish that your ears, at least, may be "dipped".

And so you can continue, from one Exempt to another,—from the Church of the Tri-une God to that House of His at the foot of the Mountain; and it is the same invariable and mercenary monotone of "miscellaneous concerts", or "musical entertainments", precisely described, in the Statutes, as "purposes other than religious worship"; and therefore subjecting the "portions

of such houses appropriated to them to taxation at the value thereof."

Nor would it require a marine telescope, to detect Catholicism in the same boat. As she gathers "The Last Rose of Summer," her "Warrior Bold" is singing "How dear the hour!" and "No, Sir!" is her coquettish response to "Love's Request." Rome, however, while insisting upon equal immunity, is believed to claim larger license both in faith and practice; veneering either with less Pharisaism than has become a second nature to Dissent.

Now who, and of what kind, are they who thus demand and get exemption from Taxation, at the expense of the remaining community? Is it Lazarus, "covered with sores" who, for a bare subsistence, must go to the dogs! Is it the poor and lowly, who, cheaply clad and unable to pay costly pew-rents, find themselves relegated to that temple in the wilderness where, without subscription or contribution-box, they may at least, look from Nature up to Nature's God! Is it not rather Dives, with his "sisters, cousins and aunts;" clothed in purple and fine linen; the pampered children of Patent and Protection; whose livelihood has legislation for a foster-mother; and to whom nothing seems more natural than that the public—patient pack-horse! should be made to bear the burden, "grievous to be borne," of their atonement and salvation. Exhorted the Apostle:—"Let him give not grudgingly, or of necessity!" Responds the disciple:—"Give not at all from your own substance,—but rather fleece the people!"

And it is for this that our Horticultural Society is singled out for an exception, or scape-goat! Its opportunities, like its doors, are open to all. Its benefits are withheld from none who would partake. Why should Boanerges, or Cream-Cheese, be selected for public beneficiaries; who toil not, neither do they spin, but whose lines have fallen in pleasant places; yea, even among the flesh-pots; whose every "house of worship" is rounded off with kitchen and pantry; and to whose holy nostrils the sniff of the sacrificial oyster ascendeth, forever and ever!

I know not how it strikes you, *Mr. President*, and my associates! but, to me, nothing in the whole political economy is so

rank with injustice, as this exemption from taxation of corporate property, upon pretexts that are merely specious; an exemption that is complete as to themselves,—partial and inequitable as it affects others. The omission from assessment of the widow, and orphan; whose mite scarce suffices to keep the wolf from their door; is one thing. It is not, at any rate, a statutory injustice. Nor has it any relation to the shameless shirking of their solemn duty, by the professed disciples of the Living God, whose explicit injunction to them was that they should "render unto Cæsar the things that are Cæsar's."

Hating wrong; and particularly that flagrant manifestation of it which is involved in special Privilege; with implicit faith in the ultimate power of Truth; I am enlisted for this war. Against principalities or powers; things present or to come; with whatsoever might is in me, I shall continue to wage it to the end.

Upon the return of the writer from Illinois; in which superb State he had spent years of that younger and brighter life, to which a lingering memory recurs as to one of those dreams of Arcadia that I cannot doubt have been experienced by all who hear me, once at least in their lives; he found the Worcester County Horticultural Society in fortunate and thrifty existence. It was object-teaching, still: as it had been in the old Town Hall: teaching from example as it continues yet, with extreme insistence upon excellence; object-teaching as, it is to be hoped, it shall endure so long as this *Trust* is maintained intact, and inviolate. William Lincoln had gone to his rest; and other duties claimed the attention of Emory Washburn: but Frederic William Paine, John Milton Earle, and Clarendon Harris, were earnest and instant, as when of old they aided to assort, analyze, and explain that floral conglomeration—the entire mass of flowers collected by the pupils of the public schools. The writer sought not,—as he could not desire,—more congenial or privileged association. The active energy of Worcester was enlisted in behalf of the young Society; for the lust and rust of riches had not then enervated the life of the town, and sapped its reserved, or latent force. His name was enrolled, in due

course. And now he finds, upon reference to his certificate of admission, that it was attested by *Secretary* Haven, to whose memory inadequate tribute has been recently paid; and by ISAAC DAVIS, *President.*

His birth just coëval with the Century,—the active career of ISAAC DAVIS had continued down almost to the recollection of the youngest who hear me. As a vigilant and successful Mayor of this City of Worcester, he was doubtless best known to the majority. But how many are aware that he was the *Second* President of this Society, succeeding *Dr.* John Green; and that, for four (4) consecutive years, from A. D. 1844, to 1848, he discharged every function of that honorable office with characteristic diligence and fidelity. This Society was extremely fortunate, in its infancy, in finding men to administer its affairs, whose position compelled respect; and whose unstinted devotion to its welfare attracted sympathy and co-operation. The well-known sagacity and prudence of Isaac Davis, in financial management, were of priceless value to an association, struggling as was this, at that period, merely to get upon its feet. The rare fortune that crowned his several terms of municipal service did not fail to distinguish his Horticultural tenure. That happy legacy of *Hon.* Daniel Waldo; to which, coming in our hour of utmost need, we may well ascribe the cause and fact of our assured permanence; fell in during his first year as President. That considerable sum, with the savings of past and current years, was so admirably managed, that its increase justified, under his immediate successor, the purchase of land and the ultimate erection of this Hall. Others are entitled to their share of the credit: and to all such, as occasion has seemed to require, due laud has been rendered. But it is simple justice to award to the clear foresight, the wise precaution, and the patient frugality, that ever characterized Isaac Davis, in other affairs, an equal measure of success when those qualities were employed by him in our behalf, and for our essential interests.

He was a constant contributor to our stated Exhibitions, and his display was almost invariably unique. Whether his own taste inclined to the singular and luxuriant forms of tropical vegetation, I should hesitate to affirm, with positiveness. But

those who can recall his terraces; and, in fact, the entire lawn before his residence upon Main *Street;* studded as it were, with immense plants of rare selection and careful culture; will realize the stock from which he could draw at will to ornament and magnify our Exhibitions. What has been achieved, since, upon such an extensive scale; by our associates, William T. Merrifield, and Stephen Salisbury; was in a manner, if not in degree, anticipated by him. If, in after life, his contributions were lessened, and finally ceased altogether; it was owing to the change of residence that diminished his opportunities, and not to any loss of personal interest. He remained a life-long lover of flowers and fruits.

Differing widely in political sentiment from a large majority of the community, for the greater part of his life, it was no slight acknowledgment of the confidence reposed in him, by his fellow-citizens, that his services were demanded at periods of the most intense partisan frenzy. That highly exalted species of patriotism which regards and denounces a political opponent, as necessarily a scoundrel, only reflected upon him in moments of stagnation and calm. After each recurring riot in oil-cloth and petroleum; each novel and convincing demonstration of the political gospel deduced from the toilsome parade, the flare of wicks, and the stench of oil; the second sober thought of the reformed community was wont to mortify its flesh, and chasten its exuberant spirit, by electing Isaac Davis to its local Chief Magistracy.

It chanced to be the good fortune of the writer, to be so situated that he could cast a decisive vote in favor of the first selection, for the Mayoralty, of our late associate. The action of the Liberal Union, at that time, commanded popular approval. The official conduct of our friend was such, that it never became necessary, thereafter, to insist upon a candidature which, in hours of public distrust or paralysis, obviously suggested itself as the one thing essential and proper.

His place at our counsels and Exhibitions has long been vacant. But there is space upon our walls for his impressive and majestic features; and in one of those panels his Portrait will be suspended, so long as our Hall may endure. His chil-

dren most cordially met the suggestion of your *Secretary;* and the work of art before you becomes, by their ready munificence, at once your property and your treasure. Reserving room for those who have exerted and spent themselves in our service; and therefore in the beneficent cause of Horticulture, everywhere; and for such exclusively; we shall bear continuing testimony to the faith heretofore delivered to the saints,—abiding in us now, forever. For others,—the portraiture of priest, or warrior; of statesman, or demagogue; of Gentile, or Mormon; of Prophet, or dupe! For ourselves—the speaking lineaments that brightened at the aspect of all that was lovely and of good report!

For us! and for our HORTICULTURAL HALL, in its renovation! Apples of Gold—in pictures of silver!

All which is respectfully submitted, by

EDWARD WINSLOW LINCOLN,
Secretary.

HORTICULTURAL HALL,
Worcester, Massachusetts, November 7, A. D. 1883.

APPENDIX "A."

RULES OF THE AMERICAN POMOLOGICAL SOCIETY, RELATIVE TO NOMENCLATURE.

SECTION I.

NAMING AND DESCRIBING NEW FRUITS.

Rule 1.—The originator or introducer (in the order named) has the prior right to bestow a name upon a new or unnamed fruit.

Rule 2.—The Society reserves the right, in case of long, inappropriate, or otherwise objectionable names, to shorten, modify, or wholly change the same, when they shall occur in its discussions or reports ; and also to recommend such changes for general adoption.

Rule 3.—The names of fruits should, preferably, express, as far as practicable by a single word, the characteristics of the variety, the name of the originator, or the place of its origin. Under no ordinary circumstances should more than a single word be employed.

Rule 4.—Should the question of priority arise between different names for the same variety of fruit, other circumstances being equal, the name first publicly bestowed will be given precedence.

Rule 5.—To entitle a new fruit to the award or commendation of the Society, it must possess (at least for the locality for which it is recommended) some valuable or desirable quality or combination of qualities, in a higher degree than any previously known variety of its class and season.

Rule 6.—A variety of fruit, having been once exhibited, examined, and reported upon, as a new fruit, by a committee of the Society, will not, thereafter, be recognized as such, so far as subsequent reports are concerned.

* * * * * *

SECTION III.

COMMITTEE ON NOMENCLATURE.

Rule 1.—It shall be the duty of the President, at the first session of the Society, on the first day of an exhibition of fruits, to appoint a committee of five expert pomologists, whose duty it shall be to supervise the nomenclature of the fruits on exhibition, and in case of error to correct the same.

Rule 2.—In making the necessary corrections they shall, for the convenience of examining and awarding committees, do the same at as early a period as practicable, and in making such corrections they shall use cards readily distinguishable from those used as labels by exhibitors, appending a mark of doubtfulness in case of uncertainty.

T. T. LYON, South Haven, Mich. *JOHN A. WARDER, North Bend, Ohio. J. J. THOMAS, Union Springs, N. Y. C. M. HOVEY, Cambridge, Mass. P. J. BERCKMANS, Augusta, Ga.	Committee.

* Deceased, since the Report was concluded.

APPENDIX "B."

EXEMPTED PROPERTY.

Description and Valuation of Estates Not Taxed.

The following is a list of the estates, religious, charitable, scientific, literary and educational, which are exempted from taxation in this city:

All Saints Society, church corner of Pleasant and Irving Streets, land, 20,295 feet; valuation, $20,000; church, $120,000; total, $140,000.

American Antiquarian Society, Library and furniture, $50,000; land, 15,225 feet; valuation, $6,500; Antiquarian Hall, $35,000; total, $91,500.

Bethel Methodist Society, Hanover Street, 10,440 feet; valuation, $2,200; church, $1,500; total, $3,700.

Calvinistic Cong'l Society, Main Street, 11,731 feet; valuation, $11,700; church, $25,000; total, $36,700.

Church of the Unity, Elm Street, 10,025 feet; valuation, $18,000; church, $17,000; total, $35,000.

Church of Christ, Thomas Street, land, 5,538 feet; valuation, $2,800; church, $6,500; total, $9,300.

Church of the Immaculate Conception, Prescott Street, 12,742 feet; valuation, $25,000; church, $25,000; total, $50,000.

Church of the Sacred Heart, Cambridge Street, 26,888 feet; valuation, $1,000; church unfinished, $25,000; total, $26,000.

College of the Holy Cross, College Street, 170 acres; valuation, $20,400; live stock and furniture, $6,000; college building, $110,000; barn, $6,000; total, $142,400.

Dewey Street Baptist Society, 6,076 feet; valuation, $500; church, $3,500; total, $4,000.

First Baptist Society, 14,588 feet; valuation, $14,600; church, $32,000; total, $46,600.

First Unitarian Society, Main Street, 14,303 feet; valuation, $7,100; church, $42,000; total, $49,100.

First Universalist Society, Pleasant Street, 11,118 feet; valuation, $16,700; church, $45,000; total, $61,700.

Grace Methodist Society, Walnut Street, 8,189 feet; valuation, $10,-200; church, $45,000; total, $55,200.

Home for Aged Females, Orange Street, 10,912 feet; valuation, $4,800; furniture, $2,000; house, $10,000; total, $16,800.

Laurel Street Methodist Society, 4,759 feet; valuation, $1,000; church, $10,000; total, $11,000.

Lincoln Sq. Baptist Church, Highland Street, 5,935 feet; valuation, $2,200; church, $23,000; total, $25,200.

Main Street Baptist Society, 21,021 feet; valuation, $14,700; church, $28,000; total, $42,700.

Mission Chapel, Summer Street, 4,940 feet; valuation, $3,700; chapel, $5,000; total, $8,700.

Notre Dame Catholic Society, Park Street, 8,895 feet; valuation, $11,100; church, $35,000; total, $46,100.

Old South Congregational Society, Central Park; church, $23,000.

Oread Institute, Oread Place, 139,776 feet; valuation, $16,000; furniture, $5,000; institute building, $16,000; total, $37,000.

Pleasant Street Baptist Society, 6,600 feet; valuation, $13,800; church, $23,000; total, $36,800.

Plymouth Congregational Society, Pearl Street, 9,193 feet; valuation, $13,800; church, $100,000; total, $113,800.

Plymouth Congregational Society and others, corner of Southbridge and Princeton Streets; 4,720 feet; valuation, $500; chapel, $2,000; total, $2,500.

Piedmont Congregational Society, Main Street, 16,416 feet; valuation, $9,800; church, $100,000; total, $109,800.

Salem Street Congregational Society, Salem Square, 7,372 feet; valuation, $8,600; church, $45,000; total, $53,600.

Society of Friends, Chatham Street, 14,468 feet; valuation, $10,000; church, $2,000; total, $12,000.

St. Matthew's Episcopal Society, Southbridge Street, 5,200 feet, land corner of Southbridge and Cambridge Streets, 12,000 feet; valuation, $500 for each; chapel, $2,000; unfinished chapel, $4,000; total, $7,000.

St. John's Catholic Society, Temple Street, 8,500 feet; valuation, $2,800; church, $45,000; total, $47,800.

St. John's schools of Worcester, house 44 Temple Street, $4,200; 7,500 feet of land, $2,300; school building, Temple Street, $5,000; land, 29,415 feet; valuation, $8,800. Vernon Street, house, $4,500; barn, $300; chapel (unfinished) and school building, $13,000; land, 99,966 feet; valuation, $10,000; total, $48,100.

St. Anne's Catholic Society, Shrewsbury Street, 8,530 feet; valuation, $4,300; church, $14,000; estate Eastern Avenue and Gage Street, 33,190 feet; valuation, $3,300; total, $21,600.

St. Paul's Catholic Society, Chatham Street, 28,102 feet; valuation, $35,200; church, $175,000; total, $210,200.

Swedish Evangelical Lutheran Gethsemane Society, Mulberry Street, 6,090 feet; valuation, $1,200; church unfinished, $3,000; total, $4,200.

Swedish Evangelical Congregational Society, Providence and Ledge Streets, 19,800 feet; valuation, $2,600; church unfinished, $———.

Trinity Methodist Society, Main Street, 8,098 feet; valuation, $13,-400; church, $43,000; total, $56,400.

Union Congregational Society, Front Street, 7,712 feet; valuation, $32,800; church, $40,000; total, $72,800.

Union Hill Methodist Society, Coral Street, 11,850 feet; valuation, $2,000; church, $12,000; total, $14,000.

Webster Square Methodist Society, Main Street, 20,000 feet; valuation, $1,000; church, $9,000; total, $10,000.

Worcester Academy, Baptist, Providence Street, 160,000 feet; valution, $18,000; Academy building, $36,000; furniture, $2,000; total, $56,000.

Worcester Children's Friend Society, Main Street, 26,266 feet; valuation, $10,500; house, $7,000; total, $17,500.

Worcester Agricultural Society, Agricultural Street, 966,134 feet; valuation, $67,600; Agricultural Hall, $6,000; total, $73,600.

Worcester County Free Institute of Industrial Science, Boynton Street, 487,792 feet; valuation, $34,200; school building, $65,000; shop, $28,000; house lot, Boynton Street, 30,800 feet; valuation, $3,800; house, $5,500; total, $136,500.

Worcester County Mechanics Association, exempt in part, library and furniture, $6,500; on building exempt in part, $16,500; estate on Main Street, exempt in part, $21,300; total, $44,300.

Zion's Methodist Society, Exchange Street, 2,521 feet; valuation, $1,500; church, $2,500; total, $4,000.

REPORT OF THE LIBRARIAN.

To the Members of the

Worcester County Horticultural Society:

Your Librarian respectfully submits the following report for the year just closed. The additions to the Library by purchase or gift are as follows:

Transactions of the Massachusetts Horticultural Society; Parts 1 and 2; 1882; R. Manning.

The American Journal of Forestry; by Franklin B. Hough; Society.

Curtis Botanical Magazine; Vol. 37; Third Series; Society.

Harvard University Bulletin; Vol. 2; No. 10; A. A. Brooks.

Harvard University Bulletin; Vol. 2; No. 11; A. A. Brooks.

Curtis Botanical Magazine; Vol. 38; Third Series; Society.

Transactions of Hingham Agricultural and Horticultural Society; Geo. Lincoln.

Nebraska and its Settlers; J. F. Allen.

High Schools for Girls in Sweden; Bureau of Education.

Maternal Schools in France; No. 5; Bureau of Education.

Technical Instruction in France; No. 6; Bureau of Education.

Industrial Art in Schools; Bureau of Education.

Planting Trees in School Grounds; Bureau of Education.

Answers to Inquiries about the United States Bureau of Education; Bureau of Education.

Circular of Information; No. 1; 1883; Bureau of Education.

Circular of Information; No. 2; 1883; Bureau of Education.

Department of Agriculture Report; 1881 and '82; 1 vol.; W. W. Rice.

Report of the Chief Signal Officer; 1879, '80 and '81; W. B. Hazen.

Sorghum and the Beet Sugar Industry; Henry Phelps.

The Grasses of the United States; Special Report; No. 63; Henry Phelps.

Area and Product of Cereals grown in 1879; Henry Phelps.

Report on the Condition of the Crops; Henry Phelps.

Annual Report of the Commission on Public Grounds; E. W. Lincoln.

The Florist and Pomologist; 1881, 1882; Society.

The Wheelman Illustrated; No. 2; Vol. 11; 1883.

Insects Injurious to Fruits; by Wm. Saunders; 2 copies; Society.

Magazine of Horticulture; Vols. 16 to 21 inclusive; from the Heirs of John C. Mason.

The Sugar Beet; Society.

Gardening Illustrated; an English weekly paper; Society.

Vick's Monthly Magazine; 1883; Society.

The Garden; an Illustrated weekly journal; Society.

The Gardener's Chronicle; Vol. 16; 1883; Society.

The Agricultural Gazette; London; 1883; Society.

The American Agriculturist; 1883; Society.

The Gardener's Monthly; Vol. 25; 1883; Society.

The Country Gentleman; Vol. 48; 1883; Society.

The Fruit Recorder; 1883; Society.

The Massachusetts Ploughman; 1883; *Courtesy* of ye Ploughman.

The Worcester Directory; 1883; Society.

All of which is respectfully submitted.

CHARLES E. BROOKS,

Librarian.

HALL OF FLORA,

November 7, 1883.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR

1884.

The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

Worcester, Mass.
CHARLES HAMILTON, PRINTER,
311 MAIN STREET.
1884.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

James Draper, *Chairman.*
James F. Allen.
George Cruickshanks.

Calvin L. Hartshorn,
Hermann F. A. Lange,
Newell Wood,
W. W. Cook,
Charles E. Parker,
William H. Earle,
Charles E. Brooks,
Adin A. Hixon.

President—Francis H. Dewey.
Secretary—Edward W. Lincoln,
Nos. 5 Oak, and 18 Front Streets.

JUDGES OF AWARD.

Flowers, Plants, Etc.—Hermann F. A. Lange.
Fruits, Vegetables, Etc.—James Draper.

COMMITTEE ON NOMENCLATURE.

James F. Allen,
Hermann F. A. Lange,
George E. Francis,
O. B. Hadwen,
James Draper.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premium must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small Fruits* must be entered in boxes or baskets (except in the case of Strawberries, which are to be shown "*flat*"); but they may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

E. The Judges may correct, before the close of any Exhibition, awards made by them, if satisfied that such were erroneous.

F. The cards of competitors shall be put, reversed, beneath the plates; and the Judges of Award shall be excluded from the Hall of Exhibition until the Exhibition itself is ready for judgment.

G. Competitors are expected to conform strictly to the conditions under which articles are invited. Evasion or violation of them may be reported to the Trustees for future disqualification of the offender.

RULES AND REGULATIONS.

1. Exhibitions will be held on every Wednesday afternoon, commencing March 5th, and terminating October 29th, A. D. 1884. The hours of exhibition will be between 3 and 4.30 o'clock. Articles offered for premium must be in the Hall by 2.15 o'clock P. M., of the days of exhibition. Between 2.15 and 3 o'clock the Hall will be in exclusive charge of the Secretary, and the Librarian, who will allow no one else to be present. The Judges of Award may be admitted under the limitations of General Rule F.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester*, for a period of at least one (1) month previous to the date of exhibition.

3. After the articles are arranged they will be under the exclusive charge of the Judges, and *not even the owners* will have liberty to *remove* them until the exhibition is closed; when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits or Vegetables is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Judges to *exclude from competition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste. The Judge of Fruits, in making Awards, will especially regard uniformity in size, symmetry of form, and beauty in color.

7. The Committee of Arrangements have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary; and the Secretary is requested to give notice of one week, in some daily paper, and also at the preceding Exhibition, when a change in the Schedule is proposed.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables, under different names, or exhibiting as grown by himself, Flowers, Fruit or Vegetables grown by another, thereby violating the objects and rules of the Society, shall be debarred from competing for the Society's premiums until reinstated.

9. No Flowers, Plants, Fruits or Vegetables will be entitled to a premium unless they possess points of superiority; and the

Judges are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them; nor shall any specimen for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

12. In all exhibitions of Cut Flowers, the use of foliage must be restricted to that of the varieties shown; and not more than three blooms, clusters, or spikes, all which shall be of one color, and of one variety, shall be allowed in the same bottle, except when otherwise specified in the schedule.

12. No Judge shall award a premium or gratuity in any case wherein he is a competitor, or has an actual or resultant interest: in any such case the judgment shall be rendered by any three of the Committee of Arrangements and Exhibitions whom the Judge shall invite.

13. No Judge shall require anything of competitors respecting their exhibits, which is not distinctly specified in the schedule. No Flowers, Fruits, etc., etc., shall be put on the tables, for competition for premiums, by any person who is a judge as to the awards to be made for Fruits, Flowers, etc., etc.

14. The standard number required for an exhibit, whether of Fruits, or Vegetables, will be Twelve (12); unless otherwise specifically declared. The usual limit of measure save for SMALL FRUITS, will be a half peck.

15. All premiums that are not claimed within three months after the close of the official year shall be forfeited to the Society.

16. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

17. "Downing's Fruits of America," revised edition, will guide the Judge of Fruits in his decisions upon matters at issue.

☞ The Judges are authorized by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

FLOWERS, PLANTS, FRUITS & VEGETABLES.

A. D. 1884.

☞ The COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS would direct the earnest attention of the Judges to *Rule* 6!

6. *It will be the duty of the Judges to exclude from competition all inferior specimens. Also, all such Designs as, in their opinion, evince an incorrect taste. The Judge of Fruits, in making Awards, will especially regard uniformity in size, symmetry of form, and beauty in color.*

FLORAL: SPECIAL RULE.—In all cases where dimensions are prescribed for exhibits, the measure shall be understood to be that of the flowers, solely; never admitting the basket, foliage, or any garniture of green.

Wednesday, March 5.

AZALEA INDICA.—

No. 1.	Three plants in bloom, three premiums	$5 00	3 00	2 00
No. 2.	One plant in bloom, two premiums.		3 00	2 00

PRIMULA SINENSIS.—

No. 3.	Four plants in bloom, three premiums	$3 00	2 00	1 00
No. 4.	One plant in bloom, two premiums		1 00	50

APPLE.—

No. 5.	Fameuse, three premiums	$1 50	1 00	50
No. 6.	Tompkins Co. King, three premiums	1 50	1 00	50

PEAR.—

No. 7.	Beurré Easter, two premiums		$1 50	1 00
No. 8.	Any other variety (named) gratuity.			

VEGETABLE.—

No. 9.	CABBAGE, Brunswick, 3 specimens, three premiums	$1 50	1 00	50
No. 10.	SQUASH, Marblehead, 3 specimens, three premiums	1 50	1 00	50
No. 11.	CELERY, six heads, three premiums.	1 50	1 00	50

Wednesday, March 12.

CINERARIA,—IN BLOOM.—

No. 12.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

HYACINTH,—IN BLOOM.—

No. 13.	Six, three premiums	$3 00	2 00	1 00
No. 14.	One, two premiums		1 00	50

APPLE.—

No. 15.	Golden Russet, of Massachusetts, three premiums	$1 50	1 00	50
No. 16.	Golden Russet (sweet), two premiums		1 00	50
No. 17.	Leicester Sweet, three premiums	1 50	1 00	50
No. 18.	Northern Spy, four premiums	2 00	1 50	1 00	50

PEAR.—

No. 19. Any variety, 12, gratuity.

VEGETABLE.—

No. 20.	CABBAGE, 3 specimens, Savoy, three premiums	$1 50	1 00	50
No. 21.	SQUASH, 3 specimens, Hubbard, three premiums	1 50	1 00	50
No. 22.	TURNIP (*White Egg*), 12 specimens, three premiums	1 50	1 00	50

Wednesday, March 19.

CYCLAMEN,—IN BLOOM.

No. 23.	Four, three premiums	$3 00	2 00	1 00
No. 24.	One, three premiums	1 50	1 00	50

CUT FLOWERS.—

No. 25.	For stand of twenty-four blooms or clusters, distinct, three premiums	$3 00	2 00	1 00

APPLE.—

No. 26.	Baldwin, 12, three premiums	$1 50	1 00	50
No. 27.	Belleflower (Yellow), three premiums	1 50	1 00	50
No. 28.	Cogswell, two premiums		1 00	50
No. 29.	Greening (R. I.), three premiums.	1 50	1 00	50
No. 30.	Ladies' Sweet, two premiums		1 00	50

PEAR.—

No. 31. Any variety, 12, gratuity.

VEGETABLE.—

No. 32.	CABBAGE, 3 specimens, Red Dutch, three premiums	$1 50	1 00	50
No. 33.	TURNIP, 6 specimens, Swede (Yellow), three premiums	1 50	1 00	50
No. 34.	TURNIP, 6 specimens, Swede (White), three premiums	1 50	1 00	50

Wednesday, March 26.

ARUM (RICHARDIA),—IN BLOOM.—

No. 35.	Best collection; grown in pot, or tub, not exceeding 16 in. in diameter, three premiums	$3 00	2 00	1 00
No. 36.	One bloom, with foliage (the largest), two premiums		1 00	50

BOUQUET—(HAND).—

No. 37.	Not more than 9 in. in diameter, three premiums	$3 00	2 00	1 00

APPLE.—

No. 38.	Peck's Pleasant, three premiums	$1 50	1 00	50
No. 39.	Sutton Beauty, three premiums	1 50	1 00	50
No. 40.	Tallman Sweet, three premiums	1 50	1 00	50
No. 41.	Washington Royal, two premiums.		1 00	50

PEAR.—

No. 42. Any variety, 12, gratuity.

VEGETABLE.—

No. 43.	Beet, 12 specimens, Turnip, three premiums	$1 50	1 00	50
No. 44.	Carrot, 12 specimens, Intermediate, three premiums	1 50	1 00	50
No. 45.	Lettuce, six heads, three premiums	2 00	1 50	1 00

Wednesday, April 2.

CUT FLOWERS—BASKET.—

No. 46.	For the best round basket, on stand, not to exceed ten inches in diameter, three premiums	$3 00	2 00	1 00
No. 47.	For the best stand, three premiums,	3 00	2 00	1 00

APPLE.—

No. 48. Any variety, gratuity.

VEGETABLE.—

No. 49.	Cucumber, three specimens, White Spine, three premiums	$2 00	1 50	1 00
No. 50.	Parsnep, twelve specimens, three premiums	2 00	1 50	1 00
No. 51.	Radish, two bunches (6 in each bunch), three premiums	2 00	1 50	1 00

Wednesday, April 9.

ZONALE GERANIUM,—IN BLOOM.—

No. 52.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

POT PLANTS,—IN BLOOM.—

No. 53. Gratuity.

APPLE.—

No. 54.	Russet (Golden), three premiums	$1 50	1 00	50
No. 55.	Russet (Red), three premiums	1 50	1 00	50
No. 56.	Russet (Roxbury), three premiums	1 50	1 00	50
No. 57.	Spitzenberg, three premiums	1 50	1 00	50

PEAR.—

No. 58. Any variety, 12, gratuity.

VEGETABLE.—

No. 59.	LETTUCE, six heads, three premiums	$1 50	1 00	50
No. 60.	POTATO, twelve specimens, three premiums	1 50	1 00	50
No. 61.	SQUASH, three specimens, three premiums	1 50	1 00	50

Wednesday, April 16.

BEGONIA,—IN BLOOM.—

No. 62.	One plant, three premiums	$3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 63.	One stand, three premiums	$3 00	2 00	1 00

APPLE.—

No. 64. Any variety, gratuity.

VEGETABLE.—

No. 65.	HORSE RADISH, 12 roots, three premiums	$1 50	1 00	50

No. 66.	PERSNEP, 12 of the same variety, three premiums	1 50	1 00	50
No. 67.	RHUBARB, 12 stalks, same variety, three premiums	1 50	1 00	50

Wednesday, April 23.

PANSY,—NO DUPLICATES.—

No. 68.	One stand, and one spike to a vial, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—

No. 69.	HANDLE BASKET, low oval, not to exceed 15 inches in diameter, three premiums	$3 00	2 00	1 00

APPLE.—

No. 70. Any variety, gratuity.

VEGETABLE.—

No. 71.	DANDELION (cultivated), one half-peck, three premiums	$1 50	1 00	50
No. 72.	SPINACH, one half-peck, three premiums	1 50	1 00	50

Wednesday, April 30.

POT PLANTS,—IN BLOOM.—

No. 73. Gratuity, if merited.

VEGETABLE.—

No. 74.	CUCUMBER, three, three premiums	$1 50	1 00	50
No. 75.	LETTUCE, six heads, three premiums	1 50	1 00	50
No. 76.	RHUBARB, twelve stalks, three premiums	1 50	1 00	50

Wednesday, May 7.

PANSY,—IN BLOOM.—

No. 77.	Six plants, distinct in color, grown in pots, three premiums.....	$3 00	2 00	1 00

BOUQUET,—HAND.—

No. 78.	Not to exceed 9 inches in diameter, three premiums.....	$3 00	2 00	1 00

VEGETABLE.—

No. 79.	ASPARAGUS, two bunches of twelve stalks each, three premiums	$1 50	1 00	50
No. 80.	DANDELIONS, half-peck (cultivated), three premiums.....	1 50	1 00	50
No. 81.	SPINACH, half-peck, three premiums	1 50	1 00	50

Wednesday, May 14.

BASKET,—ON STAND.—

No. 82.	Not to exceed fifteen inch oval, with handle, three premiums....	$3 00	2 00	1 00

BULBS—(HARDY),—OPEN CULTURE.—

No. 83.	Three premiums.....	$3 00	2 00	1 00

HYACINTH,—OPEN CULTURE.—

No. 84.	Display, three premiums.....	$3 00	2 00	1 00

VEGETABLE.—

No. 85.	ASPARAGUS, two bunches, of 12 stalks each, three premiums....	$1 50	1 00	50
No. 86.	RHUBARB, 12 stalks, three premiums.....	1 50	1 00	50

Wednesday, May 21.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 87. Stand, three premiums. $3 00 2 00 1 00

PELARGONIUM—(FANCY AND SHOW),—IN BLOOM.—

No. 88. Four plants, of distinct varieties, three premiums.....$3 00 2 00 1 00

TULIP,—OPEN CULTURE.—

No. 89. Display, three premiums.....$3 00 2 00 1 00

VEGETABLE.—

No. 90. Gratuity.

Wednesday, May 28.

CUT FLOWERS—(FROM HARDY PLANTS AND SHRUBS).—

No. 91. For the best display, open culture, three premiums.....$3 00 2 00 1 00

RHODODENDRONS.—

No. 92. For the best display, three premiums $3 00 2 00 1 00

AZALEA—(GHENT).

No. 93. For the best display, three premiums $3 00 2 00 1 00

AZALEA—(MOLLIS).—

No. 94. For the best display, three premiums $3 00 2 00 1 00

VEGETABLE.—

No. 95. RADISHES, twelve specimens, three premiums $1 50 1 00 50

No. 96. ONIONS (bunched), two bunches, six in each bunch, three premiums 1 50 1 00 50

Wednesday, June 4.

FUCHSIA,—DISTINCT VARIETIES.—

No. 97. Four plants in bloom, three premiums $3 00 2 00 1 00

IRIS.—

No. 98. For the best display, three premiums $3 00 2 00 1 00

VEGETABLE.—

No. 99. Gratuities for worthy specimens.

Wednesday, June 11.

AQUILEGIA—(COLUMBINE),—IN VARIETY.—

No. 100. Stand, three premiums..... $3 00 2 00 1 00

CUT FLOWERS.—

No. 101. ONE STAND,—the varieties of any species must not exceed three, three premiums..... $3 00 2 00 1 00

No. 102. ONE VASE,—the specimens not to be tied or wired, two premiums. 2 00 1 00

PÆONIA.—

No. 103. For the best display, three premiums $3 00 2 00 1 00

VEGETABLE.—

No. 104. BEETS (Early), twelve specimens, three premiums..... $1 50 1 00 50

No. 105. PEAS,—Half peck, three premiums..... 2 00 1 50 1 00

Wednesday, June 18.

ROSES—[To be shown in the Boxes of the Society.]—

No. 106.	For the best twelve blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums.....	$4 00	3 00	2 00
No. 107.	For the best six blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums.....	3 00	2 00	1 00
No. 108.	For the best stand of named Roses, three premiums... ...	5 00	3 00	2 00
No. 109.	For the best basket or dish of Roses, two premiums.....		2 00	1 00
No. 110.	*Dianthus barbatus*—(Sweet William).—Stand, three premiums.	3 00	2 00	1 00
No. 111.	*Digitalis* — (Foxglove). — Best display, two premiums.....		2 00	1 00
No. 112.	*Campanula media* — (Canterbury Bell.)—Best display, two premiums		2 00	1 00

STRAWBERRY.—

No. 113.	Crystal City, 25 berries, flat, three premiums	$1 50	1 00	50
No. 114.	Downer's Prolific, 25 berries, flat, three premiums.....	1 50	1 00	50
No. 115.	Jersey Queen, 25 berries, flat, three premiums.....	1 50	1 00	50

VEGETABLE.—

No. 116.	Peas, one-half peck, four premiums	$2 00	1 50	1 00	50
No. 117.	Lettuce, six heads, three premiums	1 50	1 00	50
No. 118.	Spinach, half peck, three premiums	1 50	1 00	50

Wednesday, June 25.

HYDRANGEA,—ONE PLANT, IN BLOOM.—

No. 119.	Hortensis, two premiums.....		$2 00	1 00
No. 120.	Otaksa, two premiums.....		2 00	1 00
No. 121.	Thomas Hogg, two premiums...		2 00	1 00

BASKET.—Oval, flat, not to exceed 18 inches.

No. 122.	AMATEUR,—three premiums.....	$3 00	2 00	1 00
No. 123.	FLORIST,—three premiums.....	3 00	2 00	1 00

BOUQUET—(PARLOR).—

No. 124.	AMATEUR,—three premiums....	$3 00	2 00	1 00
No. 125.	FLORIST,—three premiums.....	3 00	2 00	1 00

STRAWBERRY.—

No. 126.	Bidwell, 25 berries, flat, three premiums.....		$1 50	1 00	50
No. 127.	Charles Downing, 25 berries, flat, four premiums	2 00	1 50	1 00	50
No. 128.	Crescent, 25 berries, flat, three premiums.....		1 50	1 00	50
No. 129.	Cumberland Triumph, 25 berries, flat, three premiums.....		1 50	1 00	50
No. 130.	Hovey, 25 berries, flat, three premiums.....		1 50	1 00	50
No. 131.	Sharpless, 25 berries, flat, four premiums.....	2 00	1 50	1 00	50
No. 132.	Wilder, 25 berries, flat, three premiums.....		1 50	1 00	50
No. 133.	Wilson, 25 berries, flat, four premiums.....	2 00	1 50	1 00	50
No. 134.	Any variety, fifty berries (flat), gratuity.				

VEGETABLE.—

No. 135.	BEETS, twelve specimens, summer, turnip-rooted, three premiums.	$2 00	1 50	1 00
No. 136.	PEAS, one-half peck, American Wonder, three premiums.....	2 00	1 50	1 00
No. 137.	One-half peck, McLean's Advancer, three premiums.....	2 00	1 50	1 00

Wednesday, July 2.

CLEMATIS,—DISPLAY.—

No. 138.	Of not less than six named varieties, three premiums	$3 00	2 00	1 00

LILIUM.—

No. 139.	For the best vase, two premiums.		$2 00	1 00

CUT FLOWERS.—

No. 140.	For the best arranged stand, without restriction as to foliage, varieties, or quantity of flowers, three premiums	$3 00	2 00	1 00

HARDY FLOWERS.—BIENNIALS AND PERENNIALS.—

No. 141.	For the best stand, three premiums	$3 00	2 00	1 00

STRAWBERRY.—

No. 142.	Bidwell, 25 berries, flat, four premiums	$2 00	1 50	1 00	50
No. 143.	Glendale, 25 berries, flat, three premiums		1 50	1 00	50
No. 144.	Jucunda, 25 berries, flat, four premiums	2 00	1 50	1 00	50
No. 145.	Lincoln, 25 berries, flat, three premiums		1 50	1 00	50
No. 146.	Manchester, 25 berries, flat, three premiums		1 50	1 00	50
No. 147.	Miner's Great Prolific, 25 berries, flat, four premiums	2 00	1 50	1 00	50
No. 148.	Triomphe de Gand, 25 berries, flat, three premiums		1 50	1 00	50
No. 149.	Any other variety, 25 berries, flat, gratuity.				
No. 150.	Any variety, fifty berries, flat, gratuity.				

VEGETABLE.—

No. 151. BEAN (Snap), one-half peck, three premiums.... .....$2 00 1 50 1 00

PEA.—

No. 152. Champion of England, one-half peck, three premiums.....$2 00 1 50 1 00
No. 153. Yorkshire Hero, one-half peck, three premiums..... 2 00 1 50 1 00
No. 154. Any other variety, gratuity.

Wednesday, July 9.

IRIS KÆMPFERI.—

No. 155. Best display, three premiums...$3 00 2 00 1 00

ZONALE GERANIUMS.—

No. 156. For the best stand, 1 truss in a vial, three premiums.....$3 00 2 00 1 00

CUT FLOWERS.—

No. 157. For the best stand, of 24 named varieties, three premiums.....$3 00 2 00 1 00
No. 158. LILIUM CANDIDUM, twelve spikes, three premiums..... 3 00 2 00 1 00

RASPBERRY—(RED).—

No. 159. Brandywine, one quart, three premiums.....$1 50 1 00 50
No. 160. Hansell, one quart, three premiums..... 1 50 1 00 50

BLACKCAP.—

No. 161. Davison's Thornless, one quart, three premiums.....$1 50 1 00 50
No. 162. Doolittle, one quart, three premiums 1 50 1 00 50

CHERRY.—

No. 163.	Any variety, one quart, three premiums	$1 50	1 00	50

CURRANT.—

No. 164.	Red Dutch, one quart, three premiums	$1 50	1 00	50
No. 165.	White Grape, one quart, three premiums	1 50	1 00	50
No. 166.	White Dutch, one quart, three premiums	1 50	1 00	50
No. 167.	Any other variety, one quart, gratuity.			

STRAWBERRY.—

No. 168. Any variety, 25 berries, flat, gratuity.

VEGETABLE.—

No. 169.	Beet, twelve Egyptian Turnip-rooted, three premiums	$2 00	1 50	1 00
No. 170.	Potato, one-half peck, Early Rose, three premiums	2 00	1 50	1 00
No. 171.	Pea, one-half peck, three premiums	2 00	1 50	1 00

Wednesday, July 16.

GERMAN STOCKS.—

No. 172.	For the best stand, two premiums		$2 00	1 00

GLOXINIA,—in pots.—

No. 173.	Six varieties in bloom, three premiums	$3 00	2 00	1 00

LILIUM.—

No. 174.	Vase, two premiums		$2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 175.	Stand of (named), 3 premiums..	$3 00	2 00	1 00

HOLLYHOCK,—DOUBLE.—

No. 176.	For the best stand, one flower in each vial, three premiums..	$3 00	2 00	1 00

CURRANT.—

No. 177.	La Versaillaise, one quart, five premiums.....	$3 00	2 00	1 50	1 00	50
No. 178.	Red Dutch, one quart, five premiums.....	3 00	2 00	1 50	1 00	50
No. 179.	White Dutch, one quart, three premiums.....			1 50	1 00	50
No. 180.	White Grape, one quart, two premiums.....				1 00	50
No. 181.	Any other variety, gratuity.					

RASPBERRY.—

No. 182.	Brincklé's Orange, one quart, three premiums.....	$1 50		1 00	50
No. 183.	Clarke, one quart, three premiums	1 50		1 00	50
No. 184.	Franconia, one quart, three premiums	1 50		1 00	50
No. 185.	Hornét, one quart, three premiums	1 50		1 00	50
No. 186.	Hudson River Antwerp, one quart, three premiums.....	1 50		1 00	50
No. 187.	Northumberland, one quart, three premiums	1 50		1 00	50
No. 188.	Turner, one quart, three premiums	1 50		1 00	50
No. 189.	Cuthbert, one quart, three premiums	1 50		1 00	50
No. 190.	Any other variety, gratuity.				

BLACKCAP.—

No. 191.	Gregg, one quart, three premiums	$1 50	1 00	50
No. 192.	Mammoth Cluster, one quart, three premiums.....	1 50	1 00	50

VEGETABLE.—

No. 193.	POTATO, Beauty of Hebron, one-half peck, three premiums	$2 00	1 50	1 00
No. 194.	BEAN, Early Valentine, three premiums	2 00	1 50	1 00
No. 195.	Wax — (snap), three premiums	2 00	1 50	1 00

Wednesday, July 23.

FLOWERS,—SEEDLINGS OF 1884.

No. 196.	Stand, three premiums	$3 00	2 00	1 00

BASKET.—Round, flat, not to exceed 18 in. in diameter.

No. 197.	AMATEUR,—three premiums	$3 00	2 00	1 00
No. 198.	FLORIST,—three premiums	3 00	2 00	1 00

PETUNIA.—One spray in each vial.

No. 199.	Stand, three premiums.	$3 00	2 00	1 00

SWEET PEA.—*Best Varieties.*—

No. 200.	Stand,—not exceeding twelve flowers in a bottle, three premiums	$3 00	2 00	1 00

RASPBERRY.—

No. 201. Any variety, one quart, gratuity.

BLACKBERRY.—

No. 202.	Kittatinny, one quart, three premiums	$1 50	1 00	50
No. 203.	Snyder, one quart, three premiums	1 50	1 00	50
No. 204.	Wachusett, one quart, three premiums	1 50	1 00	50

No. 205. Any other variety, gratuity.

VEGETABLE.—

No. 206.	SQUASH, Four Summer Crook-neck, two premiums.	$1 00		50
No. 207.	Four Scallop, two premiums	1 00		50

TOMATO.—

No. 208.	Twelve, of any named variety, three premiums....	$2 00	1 50	1 00

SWEET CORN.—

No. 209.	Twelve ears of any named variety, three premiums.....	$2 00	1 50	1 00

Wednesday, July 30.

CUT FLOWERS,—GROWN FROM SEED. *By Exhibitor.*

No. 210.	Stand of distinct varieties, three premiums	$3 00	2 00	1 00

BOUQUET,—PARLOR.—Twelve inches from base to tip.

No. 211.	AMATEUR,—three premiums....	$3 00	2 00	1 00
No. 212.	FLORIST,—three premiums.....	3 00	2 00	1 00

PHLOX DRUMMONDI.—

No. 213.	Stand of best varieties, three premiums	$3 00	2 00	1 00

VERBENA,—BEST VARIETIES.—

No. 214.	Stand, one truss in a vial, three premiums	$3 00	2 00	1 00

PEAR.—

No. 215.	Doyenné d'Eté, twelve, four premiums.....	$2 00	1 50	1 00	50

VEGETABLE.—

No. 216.	Bean, Dwarf Horticultural (shell), half peck, three premiums	$1 50	1 00	50
No. 217.	Any other (named) variety, three premiums	1 50	1 00	50
No. 218.	Cabbage, three, Jersey Wakefield, three premiums	1 50	1 00	50
No. 219.	Corn (Sweet), twelve ears, three premiums	1 50	1 00	50

Wednesday, August 6.

HOLLYHOCK.—

No. 220.	For the best display, a single spike in a vial, (no duplicates), four premiums	$4 00	3 00	2 00	1 00

CUT FLOWERS,—distinct varieties.—

No. 221.	Twenty blooms, or clusters, three premiums	$3 00	2 00	1 00

GLADIOLUS.—

No. 222.	Eighteen vials, one spike each, three premiums	$3 00	2 00	1 00

APPLE.—

No. 223. Any variety, twelve, gratuity.

PEAR.—

No. 224.	Beurré Giffard, twelve, three premiums	$1 50	1 00	50
No. 225.	Doyenné d'Eté, twelve, two premiums		1 50	1 00

VEGETABLE.—

No. 226.	Cabbage, three specimens, two premiums		$1 50	1 00
No. 227.	Corn, Crosby, twelve ears, two premiums		1 50	1 00

No. 228.	POTATO, Early Ohio, one-half peck, two premiums.....		1 50	1 00
No. 229.	SQUASH, Marrow, four specimens, two premiums.....		1 50	1 00
No. 230.	TOMATO, Acme, twelve specimens, two premiums.....		1 50	1 00

Wednesday, August 13.

ANTIRRHINUM,—SNAP DRAGON.—

No. 231.	Stand, best varieties, three premiums	$3 00	2 00	1 00

GERMAN STOCKS,—BEST VARIETIES.—

No. 232.	Stand, three premiums.....	$3 00	2 00	1 00

BEGONIA—(TUBEROUS-ROOTED),—IN BLOOM.—

No. 233.	Best six plants, in pots, three premiums	$3 00	2 00	1 00

PINK—(ALL KINDS.)—

No. 234.	Stand, three premiums.....	$3 00	2 00	1 00

APPLE.—

No. 235.	Astrachan (Red), twelve, three premiums	$1 50	1 00	50
No. 236.	Early Harvest, twelve, three premiums	1 50	1 00	50

PEAR.—

No. 237.	Beurré Giffard, twelve, four premiums	$2 00	1 50	1 00	50

GOOSEBERRY.—

No. 238.	Downing, one quart, two premiums		$1 00	50
No. 239.	Any other variety, one quart, two premiums		1 00	50

VEGETABLE.—

No. 240.	Bean (shell), Concord, half-peck, in pod, two premiums.....	$1 50	1 00	
No. 241.	Tomato, Emery, twelve, two premiums	1 50	1 00	
No. 242.	Livingston's Perfection, twelve, two premiums	1 50	1 00	

Wednesday, August 20.

ASTER.—

No. 243.	Rose, eighteen vials, one spray in each, three premiums.....	$2 00	1 00	50
No. 244.	Hedgehog, eighteen vials, one spray in each, three premiums.	2 00	1 00	50
No. 245.	Cocardeau (Crown), eighteen vials, one spray in each, three premiums	2 00	1 00	50
No. 246.	Victoria, eighteen vials, one spray in each, three premiums.....	2 00	1 00	50
No. 247.	Boltzés, eighteen vials, one whole plant in each, three premiums..	2 00	1 00	50

ASTER—(Pompon.)—

No. 248.	Stand, one spray in each vial, three premiums	$3 00	2 00	1 00

GLADIOLUS—(distinct varieties named.)—

No. 249.	Eighteen, 1 spike each, three premiums	$4 00	3 00	2 00

SALPIGLOSSIS.—

No. 250.	For the best stand, three premiums	$3 00	2 00	1 00

APPLE.—

No. 251.	Astrachan (Red), twelve, three premiums	$1 50	1 00	50

APRICOT.—

No. 252.	Any variety, gratuity.....		$1 00	50

PEAR.—

No. 253.	Clapp's Favorite, twelve, four premiums	$2 00	1 50	1 00	50
No. 254.	Dearborn, twelve, two premiums			1 00	50

PEACH.—

No. 255.	Alexander, twelve, three premiums	$1 50		1 00	50
No. 256.	Beatrice, twelve, three premiums.	1 50		1 00	50
No. 257.	Cole's Early Red, twelve, two premiums			1 00	50
No. 258.	Waterloo, twelve, two premiums.			1 00	50

VEGETABLE.—

No. 259.	Squash, Turban, three specimens, three premiums	$2 00		1 50	1 00
No. 260.	Tomato, Paragon, twelve specimens, two premiums			1 50	1 00
No. 261.	Corn, Sweet, twelve ears, of not less than twelve rows, three premiums	1 50		1 00	50

Wednesday, August 27.

CUT FLOWERS,—distinct varieties.

No. 262.	Stand, three premiums	$3 00		2 00	1 00

DELPHINIUM.—

No. 263.	Stand, best varieties, three premiums	$3 00		2 00	1 00

GERANIUM—(distinct varieties named.)—

No. 264.	Stand, one truss in each vial, three premiums	$3 00		2 00	1 00

GLADIOLUS—(no duplicates.)

No. 265.	Stand, three premiums	$3 00		2 00	1 00

PHLOX—PERENNIAL.—

No. 266.	Stand, three premiums	$3 00		2 00	1 00

APPLE.—

No. 267.	Sweet Bough, twelve, three premiums	$1 50	1 00	50	
No. 268.	Duchess of Oldenburg, twelve, four premiums	2 00	1 50	1 00	50

PEAR.—

No. 269.	Clapp's Favorite, twelve, five premiums	$3 00	2 00	1 50	1 00	50
No. 270.	Rostiezer, twelve, three premiums	1 50	1 00	50
No. 271.	Tyson, twelve, three premiums	1 50	1 00	50
No. 272.	Beurré de l'Assomption, twelve, three premiums	1 50	1 00	50

PEACH.—

No. 273.	Hale (Early), twelve, three premiums	$1 50	1 00	50
No. 274.	Rivers (Early), twelve, three premiums	1 50	1 00	50

VEGETABLE.—

BEAN—(HALF-PECK IN POD.)—

No. 275.	Horticultural (pole), three premiums	$1 50	1 00	50

Wednesday, September 3.

BALSAM.—

No. 276.	Stand, one spike in each vial, three premiums	$3 00	2 00	1 00

SCABIOSA.—

No. 277.	Stand, best variety, three premiums	$3 00	2 00	1 00

ZINNIA.—

No. 278.	Stand, at least twelve varieties, two premiums		$2 00	1 00

MARIGOLD.—

No. 279.	Stand, two premiums.....		$2 00	1 00	

APPLE.—

No. 280.	Sweet Bough, twelve, two premiums		$1 00	50	
No. 281.	Williams's Red, twelve, two premiums		1 00	50	

NECTARINE.—

No. 282.	Any variety, twelve, two premiums		$1 00	50	

PEAR.—

No. 283.	Clapp's Favorite, twelve, four premiums $3 00	2 00	1 50	1 00	
No. 284.	Tyson, twelve, two premiums...		1 50	1 00	

PEACH.—

No. 285.	Cooledge, twelve, two premiums.		$1 00	50	
No. 286.	George Fourth, twelve, two premiums		1 00	50	
No. 287.	Foster, twelve, two premiums...		1 00	50	
No. 288.	Richmond, twelve, two premiums.		1 00	50	

PLUM.—

No. 289.	Imperial Gage, twelve, three premiums	1 50	1 00	50	
No. 290.	McLaughlin, twelve, two premiums		1 00	50	
No. 291.	Quackenboss, twelve, two premiums		1 00	50	
No. 292.	Washington, twelve, three premiums	1 50	1 00	50	

VEGETABLE,—FOUR VARIETIES, VIZ.—

No. 293.	BEAN, half-peck.....		Three premiums.		
	CORN (Sweet), twelve ears.				
	POTATO, half-peck.....	$3 00	2 00	1 00	
	SQUASH, three specimens...				

Wednesday, September 10.

BOUQUET—(PARLOR.)—

Best, loosely arranged.

No. 294.	AMATEUR, three premiums	$3 00	2 00	1 00
No. 295.	FLORIST, three premiums	3 00	2 00	1 00

DAHLIA—(LARGE-FLOWERED), one in a vial.—

No. 296.	Stand, best variety, three premiums	$3 00	2 00	1 00
No. 297.	POMPON, stand, one in a vial, three premiums	3 00	2 00	1 00
No. 298.	SINGLE,—best six blooms, two premiums		1 00	50

LILIUM JAPONICUM.—

No. 299.	Best display, three premiums	$3 00	2 00	1 00

NASTURTIUM AND TROPŒOLUM—(STAND).—

No. 300.	Best varieties, not more than twelve blooms in each bottle, three premiums	$3 00	2 00	1 00

APPLE.

No. 301.	Williams's Red, twelve, two premiums		$1 00	50
No. 302.	Worcester Spy, two premiums		1 00	50

APPLE—(CRAB.)—

No. 303.	Transcendent, 24, three premiums	$1 50	1 00	50

PEAR.—

No. 304.	Ansault, twelve, three premiums	$1 50	1 00	50
No. 305.	Bartlett, twelve, three premiums	1 50	1 00	50
No. 306.	Belle Lucrative, twelve, three premiums	1 50	1 00	50
No. 307.	Earle's Bergamot, twelve, three premiums	1 50	1 00	50
No. 308.	St. Ghislain, twelve, four premiums	2 00 1 50	1 00	50

PEACH.—

No. 309.	Crawford (Early), twelve, two premiums		$1 00	50
No. 310.	Oldmixon, twelve, two premiums		1 00	50

PLUM.—

No. 311.	Bradshaw, twelve, two premiums.		$1 00	50
No. 312.	General Hand, twelve, two premiums		1 00	50
No. 313.	Jefferson, twelve, two premiums.		1 00	50
No. 314.	Lombard, twelve, two premiums.		1 00	50
No. 315.	Munroe, twelve, two premiums..		1 00	50
No. 316.	Victoria, twelve, two premiums.		1 00	50

VEGETABLE.—

No. 317.	Cucumber, half-peck (for pickles), three premiums	$1 50	1 00	50
No. 318.	Pepper, twelve best, three premiums	1 50	1 00	50
No. 319.	Bean, Lima (large), half-peck, best, three premiums	1 50	1 00	50

Wednesday, September 17.

CUT FLOWERS,—distinct varieties.—

No. 320.	Twenty blooms or clusters, three premiums	$3 00	2 00	1 00

GERANIUM,—open culture.—

No. 321.	Hand, three premiums	$3 00	2 00	1 00

PANSY,—with foliage.—

No. 322.	Stand, three spikes in each bottle, three premiums	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 323.	Combination, three premiums	$3 00	2 00	1 00

APPLE.—

No. 324.	Foundling, twelve, two premiums.			$1 00	50
No. 325.	Golden Sweet, two premiums...			1 00	50
No. 326.	Gravenstein, 4 premiums..	2 00	1 50	1 00	50

PEAR.—

No. 327.	Bartlett, twelve, five premiums	$3 00	2 00	1 50	1 00	50
No. 328.	Pratt, twelve, two premiums...				1 00	50

PLUM.—

No. 329.	Coe's Golden Drop, twelve, two premiums.....	$1 00	50
No. 330.	Reine Claude de Bavay, twelve, two premiums.....	1 00	50

PEACH.—

No. 331.	Crawford (Early), twelve, two premiums	$1 00	50
No. 332.	Oldmixon, two premiums.....	1 00	50

MELON.—

No. 333.	Yellow Flesh, three specimens, two premiums.....	$1 00	50
No. 334.	Green Flesh, three, two premiums	1 00	50
No. 335.	Watermelon (2), two premiums .	1 00	50

Wednesday, September 24.

ASTER.—

No. 336.	Stand, three premiums.....	$3 00	2 00	1 00

BASKET—CUT FLOWERS.—

	Best, not to exceed fifteen inches, with handle, on stand,			
No. 337.	AMATEUR,—three premiums....	$3 00	2 00	1 00
No. 338.	FLORIST,—three premiums	3 00	2 00	1 00

VERBENA.—

No. 339.	Stand, best, three premiums....	$3 00	2 00	1 00

CUT FLOWERS—Stand.—

No. 340.	Three premiums.....	$3 00	2 00	1 00

APPLE.—

No. 341.	Porter, four premiums...	$2 00	1 50	1 00	50
No. 342.	Golden Sweet, two premiums...			1 50	1 00

APPLE—Crab.—

No. 343.	Hyslop, 24, two premiums.....			$1 00	50

PEAR.—

No. 344.	Doyenné Boussoc, twelve, two premiums.....			$1 00	50
No. 345.	Durandeau, three premiums.....		1 50	1 00	50
No. 346.	Merriam, two premiums.....			1 00	50
No. 347.	Paradis d'Automne, four premiums	2 00	1 50	1 00	50
No. 348.	Seckel, three premiums.....		1 50	1 00	50
No. 349.	Any other variety, two premiums			1 00	50

PEACH.—

No. 350.	Crawford (Late), twelve, two premiums			$1 00	50
No. 351.	Salway (free), two premiums....			1 00	50
No. 352.	Smock, two premiums			1 00	50
No. 353.	Stump the World, two premiums.			1 00	50
No. 354.	Any other variety, two premiums.			1 00	50
No. 355.	New Seedling, originated in Worcester County, three premiums		1 50	1 00	50

GRAPE.—

No. 356.	Moore, three clusters, three premiums	$1 50		1 00	50
No. 357.	Lady, three clusters, two premiums			1 00	50

No. 358.	Lindley, three premiums.....	1 50	1 00	50
No. 359.	Prentiss, three clusters, two premiums.....		1 00	50
No. 360.	Iona, three clusters, three premiums.....	1 50	1 00	50
No. 361.	Massasoit, three clusters, three premiums.....	1 50	1 00	50
No. 362.	Salem, three clusters, three premiums.....	1 50	1 00	50
No. 363.	Wilder, three clusters, three premiums.....	1 50	1 00	50
No. 364.	Worden, three clusters, three premiums.....	1 50	1 00	50
No. 365.	Brighton, three clusters, three premiums.....	1 50	1 00	50

VEGETABLE.—

No. 366.	Carrot, best twelve, any variety, two premiums.....		$1 50	1 00
No. 367.	Egg Plant, 4 specimens, three premiums.....	2 00	1 50	1 00
No. 368.	Martynia, 24 specimens, two premiums.....		1 50	1 00

Wednesday, October 1.

BASKET—(Cut Flowers).—

Not to exceed fifteen in. in diameter, flat, oval.

No. 369.	Amateur,—three premiums....	$3 00	2 00	1 00
No. 370.	Florist,—three premiums.....	3 00	2 00	1 00

STAND—(cut flowers.)—

No. 371.	Three premiums.....	$3 00	2 00	1 00

GLADIOLUS.—

No. 372.	Best display, three premiums....	$3 00	2 00	1 00

APPLE.—

No. 373.	Gravenstein, five premiums	$3 00	2 00	1 50	1 00	50
No. 374.	Holden Pippin, twelve, three premiums			1 50	1 00	50
No. 375.	Lyscom, three premiums			1 50	1 00	50
No. 376.	Twenty Ounce, three premiums			1 50	1 00	50

PEAR.—

No. 377.	Beurré Hardy, twelve, three premiums			$1 50	1 00	50
No. 378.	Beurré Superfin, four premiums		2 00	1 50	1 00	50
No. 379.	Louise Bonne de Jersey, five premiums	3 00	2 00	1 50	1 00	50
No. 380.	Seckel, five premiums	3 00	2 00	1 50	1 00	50
No. 381.	St. Michel Archange, two premiums				1 00	50
No. 382.	Washington, two premiums				1 00	50
No. 383.	Buffum, two premiums				1 00	50

PEACH.—

No. 384. Any variety, twelve, gratuity.

GRAPE.—

No. 385.	Concord, three clusters, three premiums		$2 00	1 00	50
No. 386.	Delaware, four premiums	2 00	1 50	1 00	50
No. 387.	Duchesse, two premiums			1 00	50
No. 388.	Pocklington, two premiums			1 00	50
No. 389.	Any other variety, gratuity.				

VEGETABLE;—FOUR VARIETIES, VIZ:—

No. 390.	ONION, half-peck POTATO, half-peck CABBAGE, three specimens SQUASH, six specimens	Three premiums, $2 00	1 50	1 00
No. 391.	CAULIFLOWER, three specimens, two premiums		1 50	1 00

Wednesday, October 8.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 392.	Stand, three premiums.....	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 393.	Combination, three premiums...	$3 00	2 00	1 00

APPLE.—

No. 394.	Garden Royal, twelve, two premiums		$1 00	50
No. 395.	Maiden's Blush, three premiums.	1 50	1 00	50
No. 396.	Washington Strawberry, two premiums		1 00	50
No. 397.	Any other variety, gratuity.			

PEAR.—

No. 398.	Beurré Bosc, twelve, five premiums	$3 00	2 00	1 50	1 00	50
No. 399.	Dr. Reeder, three premiums....		1 50	1 00	50
No. 400.	Sheldon, four premiums..		2 00	1 50	1 00	50
No. 401.	Any other variety, gratuity.				

GRAPE,—OPEN CULTURE.—

No. 402. Any variety, three clusters, gratuity.

QUINCE.

No. 403.	Champion, twelve, three premiums	$1 50	1 00	50
No. 404.	Orange, twelve, three premiums.	1 50	1 00	50

VEGETABLE.—

No. 405.	POTATO.—Six varieties (named), twelve each, three premiums..	$2 00	1 50	1 00
No. 406.	SQUASH, Hubbard, three, three premiums	1 50	1 00	50
No. 407.	CELERY, six, three premiums....	2 00	1 00	50

Wednesday, October 15.

CUT FLOWERS.—(BOUQUET.)—

No. 408.	Style, flat, mantle, not to exceed twelve inches from base to tip, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—(STAND.)—

No. 409.	Three premiums	$3 00	2 00	1 00

APPLE.—

No. 410.	Baldwin, six premiums	$4 00	3 00	2 00	1 50	1 00	50
No. 411.	King of Tompkins County, four premiums			2 00	1 50	1 00	50
No. 412.	Leicester Sweet, three premiums				1 50	1 00	50
No. 413.	Any other variety (named), gratuity.						

PEAR.—

No. 414.	Beurré Bosc, twelve, four premiums	$2 00	1 50	1 00	50
No. 415.	Dix, twelve, three premiums		1 50	1 00	50
No. 416.	Onondaga, three premiums		1 50	1 00	50

GRAPE,—OPEN CULTURE.—

No. 417.	Any variety, three clusters, three premiums	$1 50	1 00	50

QUINCE.—

No. 418.	Any variety (named), twelve, three premiums	$3 00	2 00	1 00

VEGETABLE.—

No. 419.	KOHL RABI, six specimens, three premiums	$1 50	1 00	50

ONION.—

No. 420.	Red Globe—Half peck, three premiums	$1 50	1 00	50

No. 421. Yellow Danvers—Half peck, three premiums..... 1 50 1 00 50

SALSIFY.—

No. 422. Twelve specimens, 3 premiums..$1 50 1 00 50

Wednesday, October 22.

CUT FLOWERS.—

No. 423. In any form, gratuity.

APPLE.—

No. 424. McClellan, twelve, three premiums $1 50 1 00 50
No. 425. Sutton Beauty, three premiums. 1 50 1 00 50
No. 426. R. I. Greening, five premiums 3 00 2 00 1 50 1 00 50
No. 427. Any other variety (named), gratuity.

PEAR.—

No. 428. Beurré d'Anjou, twelve, five premiums 3 00 2 00 1 50 1 00 50
No. 429. Beurré Diel, three premiums.... 1 50 1 00 50
No. 430. Doyenné du Comice, five premiums 3 00 2 00 1 50 1 00 50
No. 431. Urbaniste, four premiums 2 00 1 50 1 00 50

VEGETABLE.—

No. 432. BEST COLLECTION, grown from seed that was itself raised by the competitors, three premiums..$3 00 2 00 1 00
No. 433. SALSIFY.—Best twelve specimens, three premiums..... 1 50 1 00 50

Wednesday, October 29.

FERN—(PARLOR).—

No. 434.	Best plant, three premiums.....	$2 00	1 00		50

PALM—(PARLOR).—

No. 435.	Best plant, three premiums.....	$2 00	1 00		50

POT PLANTS—IN BLOOM.

No. 436. Gratuity.

APPLE.—

No. 437.	Hubbardston Nonesuch, five premiums	$3 00	2 00	1 50	1 00	50
No. 438.	Canada Red (Old Nonesuch), three premiums.....			1 50	1 00	50
No. 439.	Mother, three premiums.....			1 50	1 00	50
No. 440.	Northern Spy, four premiums		2 00	1 50	1 00	50
No. 441.	Roxbury Russet, four premiums		2 00	1 50	1 00	50
No. 442.	Yellow Belle Flower, three premiums			1 50	1 00	50

PEAR.—

No. 443.	Beurré Clairgeau, three premiums	$1 50			1 00	50
No. 444.	Beurré Langelier, three premiums			1 50	1 00	50
No. 445.	Dana's Hovey, three premiums..			1 50	1 00	50
No 446.	Duchesse d'Angoulême, four premiums		2 00	1 50	1 00	50
No. 447.	Glout Morçeau, three premiums.			1 50	1 00	50
No. 448.	Josephine de Malines, three premiums			1 50	1 00	50
No. 449.	Lawrence, five premiums	3 00	2 00	1 50	1 00	50
No. 450.	Mount Vernon, two premiums..				1 00	50
No. 451.	Winter Nelis, four premiums		2 00	1 50	1 00	50
No. 452.	Sieulle, three premiums.....			1 50	1 00	50
No. 453.	Vicar, three premiums.....			1 50	1 00	50

VEGETABLE.—

No. 454.	COLLECTION, four premiums	$3 00	2 00	1 50	1 00
No. 455.	Best Collection of Seeds of Garden Vegetables *(Potatoes excluded)*, grown by competitors, four premiums	$4 00	3 00	2 00	1 00
No 456.	CELERIAC, six specimens, three premiums		1 50	1 00	50
No. 457.	CELERY, twelve, four premiums	4 00	3 00	2 00	1 00

SPECIAL CHRYSANTHEMUM EXHIBITION

ON

Wednesday, November 12.

No. 1.	For the best six Chinese, or large-flowered, in pots,—distinct named varieties, three premiums	$4 00	3 00	2 00
No. 2.	For the best six Japanese, in pots, distinct named varieties, three premiums	$4 00	3 00	2 00
No. 3.	For the best six Pompon, in pots, distinct named varieties, three premiums	$4 00	3 00	2 00
No. 4.	For the best three plants, in pots, from Amateurs, — distinct (not named), three premiums	$2 00	1 50	1 00
No. 5.	For the best display, in pots, any variety, three premiums	$6 00	4 00	2 00
No. 6.	For CHRYSANTHEMUM,—Cut Blooms.—Stand, one spray in each vial, three premiums	$3 00	2 00	1 00

Voluntary contributions of Baskets and Bouquets of Flowers, are respectfully solicited.

This Exhibition will be open to the public, without charge, from 3 o'clock, P. M., until 10 o'clock, P. M.

N. B. All articles, intended for this Special Exhibition, must be in the Hall, and ready for inspection by the Judge, by One (1) o'clock, P. M., precisely, of the day of the Exhibition.

By authority of the

Committee on Arrangements and Exhibitions.

Attest:

EDWARD WINSLOW LINCOLN,

Secretary.

OFFICERS AND COMMITTEES

OF THE

WORCESTER COUNTY HORTICULTURAL SOCIETY,

FOR THE YEAR 1883-4.

PRESIDENT:

FRANCIS H. DEWEY, of Worcester.

VICE-PRESIDENTS:

STEPHEN SALISBURY, of Worcester; WILLIAM H. EARLE, of Worcester; HENRY L. PARKER, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

CHARLES E. BROOKS, of Worcester.

TRUSTEES (BY ELECTION):

Paul Whitin,	Whitinsville.
George Cruickshanks,	Fitchburg.
Charles E. Parker,	Holden.
James F. Allen,	Worcester.
Henry Woodward,	"
William T. Merrifield,	"
George E. Francis,	"
H. M. Quimby,	"
Samuel Flagg,	"
Horatio Phelps,	"
Frank J. Kinney,	"
John C. Newton,	"
Emory Banister,	"
John D. Lovell,	"
George F. Hoar,	"
George Calvin Rice,	"
O. B. Hadwen,	"
William Eames,	"
Sylvanus Sears,	"
Henry Phelps,	"
Nathaniel Paine,	"
Joseph C. Lovell,	West Boylston.
Newell Wood,	Millbury.
David L. Fiske,	Grafton.
Thomas A. Dawson,	Worcester.
J. Henry Hill,	"
James Draper,	"
F. M. Marble,	"
William W. Cook,	"
Calvin L. Hartshorn,	"
Joseph Lovell,	"
Stephen Salisbury, Jr.,	"
Edwin Morse,	"
Hermann F. A. Lange,	"
John Midgley,	"
S. H. Record,	"
Mrs. Daniel Tainter,	"
Mrs. John H. Coes,	"
Mrs. T. L. Nelson,	"
Mrs. Adin A. Hixon,	"
Mrs. Thomas Ward,	"

STANDING COMMITTEES.

ON FINANCE:

Stephen Salisbury, Jr., 1884. Edward W. Lincoln, 1885. Nathaniel Paine, 1886.

ON LIBRARY AND PUBLICATION:

Edward W. Lincoln. Charles E. Brooks. George E. Francis.

ON NOMENCLATURE:

James F. Allen, George E. Francis, Hermann F. A. Lange, O. B. Hadwen, James Draper.

ON ARRANGEMENTS AND EXHIBITIONS:

James Draper, *Chairman*, James F. Allen, George Cruickshanks, Newell Wood, William W. Cook, Charles E. Parker, William H. Earle, Charles E. Brooks, Calvin L. Hartshorn, Hermann F. A. Lange, Adin A. Hixon, with *President* Dewey, and *Secretary* Lincoln.

JUDGES:

ON FLOWERS, PLANTS, ETC.

Hermann F. A. Lange.

ON FRUITS, VEGETABLES, ETC.

James Draper.

TRANSACTIONS

OF THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1884.

COMPRISING THE

ANNUAL REPORT OF THE SECRETARY,

AN APPENDIX,

THE REPORT OF THE LIBRARIAN,

A LIST OF AWARDS DURING THE YEAR,

AND THE

BY-LAWS OF THE SOCIETY.

Worcester, Mass.
PRESS OF CHARLES HAMILTON,
311 Main Street.
1885.

WORCESTER COUNTY

HORTICULTURAL SOCIETY.

A. D. 1884.

ANNUAL REPORT OF THE SECRETARY.

To the Members of the

Worcester County Horticultural Society.

I CAN congratulate you, with cordial sincerity, upon a year of unparalleled success. The repairs and improvements of your Hall, just completed at the date of the last Annual Meeting, have met with merited appreciation and attracted generous patronage. Some further renovation,—imperatively required to preserve the work already done,—notably a new floor in the Hall of Ceres,—has been directed by the Finance Committee and is finished to their satisfaction. An unknown and radical defect in the sewerage of the building was detected, by the merest chance, and at once remedied in the most thorough manner, as was alike the interest of your tenants and of the Society itself. Every expense has been met from accruing revenue; and, what could not even be attempted A. D., 1883, there is also an important reduction in the sum of the corporate indebtedness. Thanks are due to our Janitor, whose assiduity has closely guarded our property from harm by the elements; and whose unwearied industry has met all the demands of a constant and exacting custom. Only those who have had occasion to be up night after night,—like those owners of Jerseys who, aware of the miraculous

precipitation of butter,—would yet prefer its extraction from the udder as a liquid; and therefore watch their herds by night,

"All sitting on the ground;"

from fear that the cream may steal a march upon them; those alone who, with all this, have been subject to an incessant beck and call, can realize the arduous nature of the duties imposed upon such an officer and how well they have been met in this particular instance.

Your *Weekly Exhibitions* have deserved public approval and have received it. Contributions have been ample,—latterly, profuse: in most cases showing a marked advance in cultural skill. Of course, there is a variation in departments, from year to year; some flowers being in richer bloom, some fruits in finer fragrance or flavor, as drought or moisture dominate the season. But the close observer is able to note the steady annual advance; the steps in progression which indicate that our mission has not proved a failure, and that the seed sown at our Weekly Exhibitions has not been lost in stony ground nor fatally choked by thorns. Those Exhibitions have fulfilled the purpose for which they were designed:—object-teaching of the multitude at a progressive school, without price or restriction.

Your numbers have been lessened, from natural causes, as elsewhere deplored: but there was also a healthy, because unsolicited, accession of new members. Only those who love Horticulture, for its own sake, are apt to apply of their own accord for admission to our ranks. None expect to re-coup themselves for the price of their certificate by a prospective dividend from the sale and distribution of our property.

"Come, let us kill him! And the inheritance may be ours!"

might be the motto of laborers in the Hebrew vineyard, as familiar to Christ. But the disciples of this latter dispensation construct rather than depreciate or destroy. As Horticulturists—they would prefer to build up and consolidate this Society, instrumental of good as it has been,—rather than disperse and confound it.

Yet the fact cannot be disguised that many faces have grown unfamiliar which used to brighten our Exhibitions. Anything that tends to lessen zeal or alienate co-operation, in a Society like this, is not alone to be regretted: it should be frowned down! That discord has crawled in among us; for she only crawls, never walking erect; is too painfully obvious to need mention. Whether those who have been successful in projecting and carrying out a certain definite line of policy; essential in their judgment to the continued vigor and vitality of the Society; have shown themselves intolerant and proscriptive, is not for your *Secretary* to determine. Any such error,—of sentiment or action,—is capable of amendment, and should be summarily redressed. Nor is it for him to denounce a spirit of chronic carping and cavil, which relucts at every decision by competent judges and revolts at the very deliberate and settled policy of the Society itself. For that has become its policy, for a year at least, after it is once discussed and adopted. If a majority cannot rule, no option is left but anarchy. Cabal nor clique should have place in our councils, nor influence upon our action. *Res adjudicata est!* for the twelve months ensuing.

Your *Secretary* will not presume that he has himself escaped the suspicion of partiality, from some who, knowing him imperfectly, can form but an inadequate judgment of his motives. He has striven honestly to avoid a blind partisanship. If, when "the heathen were raging furiously",—it was found necessary by the Apostle to the Gentiles to be "made all things to all men, that he might by all means save some"; how indispensable has it been that some one should endeavor to preserve a clear head and an unruffled demeanor, in this latter clash of opinion and assumed variance of interest. It can matter but little to him, during the brief period that he may continue in your service, into what course your action may be directed or perverted. But he has seen this Society in its infancy; he has watched its steps grow stronger and more self-reliant until now when, in the full maturity of its powers and resources it should aim at nor content itself with nothing less than a perfect development, that is clearly within its reach: to find it riven into sections! divided into jealous coteries which, if not at the sword's point, at least

make faces at each other! one disputing because the other affirms,—and for no better reason!

"But yet the pity of it, Iago! O, Iago, the pity of it, Iago!"

This Society was incorporated, March 3d, A. D., 1842. But a few years must elapse ere those of you who survive will be called upon to take worthy note of your Fiftieth Anniversary. Will not a suitable commemoration require? should it not command the heartiest co-operation of our entire Membership? regardless of whether this premium might have been otherwise awarded,—that gratuity wholly withheld! In a voluntary association such as this,—with no other attraction than mutuality of taste; without stronger bond of union than the mere accord of opinion; how infinitely truer is it than of yore, that "a house divided against itself shall not stand!"

"Why are these things thus?" sorrowfully exclaimed the great American Patriot, as he sacrificed the last of his wife's relations,—her pet lamb, as it were,—upon the altar of an internecine Moloch. Similar, if but in unequal measure, is the despairing cry from the great army of Pomologists who experience failures for which no theory will satisfactorily account. Says a writer from Vineland,—

"After one of the severest drouths ever known here there came a season of too much rain, setting in towards the end of July and continuing for several weeks. It was too late to do the waning crops of Blackberries much good, but it helped sweet Potatoes, started weeds as if by magic, and also started up the Grape-Rot, particularly on Concord vines.

* * *

That the old favorite, the Concord, must go, admits of no dispute."

If he has learned that the Concord must go,—even there where the organic law of Prohibition appears to have no control over, even if it has any recognized relation to, "*auri sacra fames*",—he has a lesson that should profit him much. Upon its first introduction, good because there were none better; comparatively worthless now that the laws of cultivation are growing simpler, and the name of its superiors is legion; what needs but to dismiss it—without regret for its departure, with kindly recollec-

tions of the good that it has done; and with the hope that, laid in the grave beside the Wilson strawberry, they may maintain a seemly peace after "life's fitful fever."

Sad to relate,—the same writer confesses that "an industry which has steadily gained ground for some years is that of making unfermented wine." They don't allow it to "ferment"—oh no! but—"various processes are used for clarifying it." Do you not all perceive numerous channels in which such sanctified tipple may be useful? What viticulturist in this audience, lacking a market for his fruit in the skin, will prove a deadhead in this virtuous enterprise? The average "hoss-trot," on that day of Agricultural Fairs, which illustrates and vitalizes the contribution-box of Exempt Worship, could not more vividly typify the "wicked partner" of modern business.

In our own vicinage—who shall tell why the Rose-beetle,—that pest of the choicer flowers and fruits,—was comparatively innocuous, or wholly failed to put in an appearance, throughout the season just past? What became of the Cock-chafer (May-Beetle, if you prefer?) with whose larvae the writer has seen the soil of Elm Park, in this City, literally crawling? Was it that extreme cold of the latest Spring month, just as they would naturally be ascending to the surface of the ground? Is man utterly helpless in the presence of Nature? Must he sit idle,—dependent upon her resistless forces,—without other resource when they fail to respond to his prayer? Such are among the problems that must be solved, if we would be sure of success.

In England, they want to know why is there so slight fruition for such abundant bud and blossom! One accounts for a sparse yield of Apples and Pears because, in his vicinity, the wood of the previous season was immature. Another complains of rain washing out the pollen; yet another of the drought that shriveled the buds or dwarfed the growing fruit;—while a third thought it was just his luck, opining that the laws of Nature had been suspended to plague a single individual! himself.

Here,—in this great Pomological County of Worcester, we have in May a fall in temperature to 28° Fahrenheit, and yet our absolute loss is less than was expected. Strawberry plants, in too rapid development, got a decided check. Others,—whose

location served for a partial protection from such unseasonable cold,—yielded a fair crop. But, if the market-question is legitimate, in a Horticultural point of view, where, all things considered, was the profit? Has not the time come when the Pomologist, if he would derive a living from his business, must attend to it or quit it? It has seemed—for long,—to your *Secretary*, that greater avail must be had of the simpler forces of Nature. Cannot the strawberry plantation be submerged? fond of water in its season as it confessedly is, precisely as must be done with the cranberry. Of course, it should likewise, in that event, possess the lowlands, whereto windmills may lift upon occasion; or the running stream supply its convenient and copious aid? Why cannot that windmill,—seldom idle in Worcester County save from choice,—suck or drive, through a system of subterranean pipes, compelling a smudge when untimely frost threatens the life of the vernal Strawberry or the autumnal Tomato, Squash, or Celery? Some may smile at the suggestion of such possible advanced culture: but he laughs best who laughs last, and he laughs last who wins. You advise and practice underdraining to rid yourselves of superfluous moisture, or to ærate your land. May not tiles, of whatever material, perforated or otherwise, be utilized as effectively for purposes wholly different?

All these problems are speculative,—hypothetical,—exacting experiment for a test. Some of them may well be tried in Amherst; yet location cannot but enter into the accurate determination of others. Why should not this great Pomological County have an Experiment Station of its own, devoted exclusively to the solution of difficulties in Horticulture? The State Bounty to our local Agricultural Societies might well be diverted to its support. For ampler sustenance a portion of our own income could find no more profitable use, thereby most effectually

"Advancing the science and encouraging and improving the practice of Horticulture,"

the explicit object for which we were incorporated, as so often pressed upon your attention in these Reports. The Peach is

grown, with greater or less success, in all our lacustrine Towns.* Wheresoever its culture falls short, or fails, such a Station might detect the trouble and discover its remedy. Individual research, or trial, is apt to be uni-lateral, or prejudiced: Science is many-sided and impartial; seeking for truth, if mayhap at the bottom of a well. We now grow much fruit and vegetables with marked skill and success. Is it not our own fault if we omit to avail ourselves of every appliance and methed that may serve to detect and explain the latent reason for too frequent failures. The Agricultural Societies are even now legally constrained to hold Institutes, by way of some practical return for the State Bounty. Too often it is like threshing an old bundle of straw. Few pause in the course of hard, daily labor, to note the reasons for success or failure; and, if the mind begins to speculate upon the knotty problem, the thread of inquiry is apt to be lost in the first night's sleep. Fewer still are qualified by natural bent, or by training, to follow a path of original research, usually intricate, mainly obscure, and where the clue is either invisible or impalpable. For all such investigation,—whether of Insect or Fungus;—which shall teach us to know our Insect Friends from our Insect Foes; determining the cause of Yellows in the Peach or Blight in the Pear; something more searching and precise is needed than the occasional conference of friends and neighbors. Something more like the keen analysis and tireless watch of the acute student of Nature, who takes nothing for granted; but, having discovered the origin and source of disease, is not content until he has also found a perfect remedy. He alone can "prove all things, holding fast that which is good."

For a long series of years,—now well-nigh a generation,—the present *Secretary* of this Society has been wont to prepare an Annual Report upon matters that appeared to him of interest or instruction to his fellow-members.

"Ye take too much on you, ye sons of Levi!"

Such may, or not, have been his individual fault or foible. Yet,

* Grafton and Shrewsbury at the foot and by the shores of Quinsigamond,—where, as by the inland Lakes of Central New York, the Grape and Peach have flourished for aye; and upon whose opposite slopes and hill-sides, in conjunction with the projected School of Natural History, a Horticultural Experiment Station could be essayed to the utmost advantage, at the least cost, and with the most effective and sure co-operation. E. W. L.

throughout, he has enjoyed the encouragement and sympathy of THOMAS, and MEEHAN, of DOWNING, and WILDER. But the excellent President of the Massachusetts Horticultural Society, whose success in growing the Philosopher's Stone* has acted like a constriction upon the development of the Concord School of Philosophy, was delivered, in March last, of the following immaculate conception :

"The publications of this Society will compare favorably with those of others. The reports of a Horticultural Society should contain all its doings, and should give accounts of all the objects exhibited, and not be devoted exclusively or mainly to remarks by the Secretary, as is the case with some."

The publications of the Massachusetts Society are invaluable. They are replete with priceless experience. And as much may be claimed for our own. Latterly, when this Society discontinued its meetings for discussion,—for the sound reason that a re-hash was not, and could not be converted into, fresh meat,—there remained but little save the dreams, "vain imaginings" perhaps, of your *Secretary*, wherewith to fill an otherwise empty page. It might have continued blank. But then,—shall it be left for him to assert? some hundreds of dollars might have been lost to this Society; while twice the sum would be payable by the Massachusetts Society to help conduct Boston Sewage toward Massachusetts Bay.

When your *Secretary* was in the habit of pleading before that Horticultural Son of Anak,—then Chairman of the Agricultural Committee,—for Legislative Protection from Frugivorous Birds, his reply was prompt that nothing could be done. "Barkis is willin'"!—but! Had only the trial been made! Now that a long advance towards equality before the law has been attained, why should not the Massachusetts Society welcome an opportunity of applying its unexpected savings to advance the Science and promote the Practice of Horticulture as suggested in this recommendation of an Experiment Station?

The quality of our local crop of *Apples* is so superior, this season, that the matter of their profitable disposition becomes of

* What are those? said the Western sciolist as, looking over the fence, he pointed to some thrifty egg-plants. "Philosopher's Stones"! was the gruff reply.

vital interest to Orchardists. You have listened to satiety concerning the importance of fostering a home market, during the political contest just closed; and, with Apples and Pears at their present price, may weigh the validity of the argument. Happily the foreign market is yet open to you; though how soon it may be closed, if we continue to maintain our own system of exclusion, cannot be precisely anticipated. For your more definite information, I extract from "*The Garden*" the subjoined particulars respecting the appearance of the Apple crop in Europe and America, as it was furnished by the largest dealers in Covent Garden:—

"THE APPLE CROP:—*United Kingdom*,—Crop much below the average. *France*,—An average yield of early kinds, especially in the Gironde; late and better descriptions somewhat short. *Germany*,—Short crop generally. *Belgium*,—Short crop. *Holland*,—Very light crop. *Spain* and *Portugal*,—Crop short, description common. *America*,—There are indications that the crop will not equal in bulk that of 1880, yet the yield in some of the best producing localities is likely to be very abundant, and far superior in quality to the past two seasons. After mature consideration of the various reports there is little doubt that the crop of Europe is considerably under that of many years; that it will be from America that the supply for the United Kingdom will be derived. The prospect of shipments being advantageously made to England was never more promising, particularly for the better and later description of Apples."

NOTE: The same London *Garden*, in an issue subsequent to the last Annual Report of your Secretary, thus described the inferiority of the English Apple crop, for the previous year:—

"XMAS-TIDE: 1883: England:

"Apples, a very heavy crop, have been small and inferior in quality. There are not sufficient first-class English Apples now in the market to keep down the prices of American and Canadian goods. The importation of Apples from New York is now comparatively small. Boston, however, sends a fair portion, but Nova Scotia, during the last few years, has sent more than both New York and Boston put together. And the variety is also greater, the principal sorts being Baldwin, Greening, Russet, King Tompkins, Ribston, Nonpareil, Spitzenberg, and a few Blenheims. The great advantage, in a commercial point of view, is the way in which foreign fruit is sorted. Although the standard of quality does not come up to that of home grown produce, the prices realized lately have been 20 s. to 25 s. per

barrel of 3 bushels. New York Apples have chiefly consisted of Newton Pippins, of which however but few good samples have reached the market this year. When really good, they fetch from 30 s. to 60 s. per barrel of 2½ bushels; other sorts, such as Northern Spy, Seek-No-Further, &c., &c., making from 20 s. to 25 s. per barrel of 2½ bushels."

Only,—if you get that foreign market, because they have not enough fruit of their own,—strive to retain and secure it by the scrupulous honesty of your subsequent dealings! Shun the deacon and his pomological ways! Let not appearances deceive, but be careful that the extremes of a barrel meet, in like quality, at the middle. An orchardist in Worcester may just as well build up a reputation in England, and establish a character for his especial brand of fruit, as a manufacturer or machinist—his townsmen—for the products of their skill. All depends upon the individual. For, when he has confirmed a name for integrity, he will simply decline to forfeit it by the shipment,—it matters not what the inducement,—of an inferior article. When his fruit is inferior—he will keep it at home. That is simple enough, and will always suffice to distinguish the swindler at heart from a man who is honest through and through.

We hear, very often, of the good old times whose antiquity is supposed to lend them a flavor that was not even suspected by the generation that endured them. Does

"distance lend enchantment to the view?"

Or has memory failed to retain all trace of the disappointment and failures that then, as now, attended the best endeavors? Certain is it, that never within the Forty-Two years throughout which this Society has existed, was fruit larger or more perfectly developed than during the season just closed. We are told that figures will lie and also that they may be made to prove anything. Well,—the figures are, that A. D., 1859, the largest *Beurré Bosc* on exhibition weighed eight (8) ounces. It was accounted a great gain, the next year (1860,) because a single specimen weighed nine and one-half (9½) ounces. At the utmost, a dozen would have been credited with one hundred and fourteen (114) ounces. But A. D., 1884, after the lapse of twenty-four (24) years, twelve specimens of that superb variety, from one con-

tributor, weighed eight pounds and 9½ ounces,—or one hundred and thirty-seven and one-half (137½) ounces in all,—of uniform and surpassing excellence. Wherein do those figures lie?

Again,—a single *Seckel*, A. D., 1859, weighed three and one-half (3½) ounces; another, A. D., 1860, four and three-quarters (4¾) ounces: the aggregate of a dozen, at that highest rate, being Fifty-Seven (57) ounces. But there was no such dozen! Now,—A. D., 1884, twelve *Seckels*, entered in one lot, weighed Four pounds and twelve and one-half (4 lbs. 12½) ounces,—the gross weight in ounces being Seventy-six and one-half (76½).

The experience of the Society with the *Bartlett* has been varied and somewhat peculiar. A. D., 1860, the largest specimen exhibited weighed twelve (12) ounces. There is no record that such extreme weight was ever exceeded, here. But the probability is strong,—indeed almost demonstrable as fact,—that the specimen was unique. A. D., 1862, a subscription initiated by John C. Ripley, resulted in the offer of a Premium of Twenty-Five Dollars! ($25.00!) for the "Twelve best Bartlett Pears grown by the competitor in the County of Worcester." It chanced to be the lot of our present honored President to adjudicate upon the dozen entries made for that extraordinary premium. His Report says that

"All the entries for this Premium were deserving of praise, but there were two plates numbered 16, and 20, between which the contest evidently lay. They each presented strong points; they were evidently both of great weight. No. 16 contained four pears superior in size to any of No. 20. The twelve pears of No. 16 weighed 8 pounds and 1 ounce. The twelve pears of No. 20 weighed 7 pounds and 12 ounces. While no single pears of this plate were equal in size to some of No. 16, yet they were of more uniform size and superior in fairness and color. Had there been a great difference in the weight, the Committee would have been governed by that, but the difference of only five ounces in one hundred and twenty-nine ounces we thought was balanced by the greater uniformity and fairness of the others, &c."

The premium was therefore awarded, in equal shares to Messrs. John C. Ripley, and E. S. Stebbins, each of whom returned his moiety that a similar premium might be offered for competition during the ensuing year. The result was a severe disappointment. But six (6) competitors appeared, and the weight of the successful dozen was Eight pounds one and one-fourth ounces;

showing an excess of only one-fourth of an ounce over the heaviest twelve of 1862. Now, in this year of grace, 1884, without any particular stimulus; assuredly in the lack of such a strong temptation as is conveyed in the offer of Two Dollars ($2.) apiece; a dozen *Bartlett* Pears have been shown, that turned the scale at Eight pounds three and one-half (8 lbs. 3½) ounces.

What can such figures be made to prove? Is it not what George Jaques (then President) declared when he said that

"directions how to take such a prize (the $25.00: premium for Bartletts) might be written out as clear and straightforward as those which a traveller reads upon a guide-board. What is essential is mostly comprised under the heads of a rich soil, of four or five times the depth of ordinary cultivation; under-drainage, where the subsoil requires it; cultivation, or mulching of the surface; thinning out of the fruit; shelter from the wind, and judicious pruning."

This will cost money and toil: What does not, that is worth having?

It was particularly noticed, A. D., 1860, that the specimens of *Sheldon* exhibited were inferior to those shown in 1859. With what admiration would those shrewd observers have gazed upon the *Sheldons* that graced your tables, last month,—October 8th, notably, when twelve were found to weigh Ten pounds, two and one-quarter (10–2¼) ounces!

Nor should that dozen of the *Orange* QUINCE be lost to record,—weighing as they did the unequalled heft of Eleven pounds and twelve and one-half (11–12½) ounces. They were grown in Millbury, but not in proximity to the Blackstone, it is said. Yet, if the soil of that thriving town is so thoroughly saturated, as has been sworn to, often; is it likely that those Quince-bushes entirely escaped the beneficent influence! When Worcester establishes that Osier-filter for the benefit of the mill-owners a-down the Blackstone, may it not be worth the while to intersperse an occasional Quince-bush in such sanitary plantation? If to this could be superadded the levy of a customs-tax, discriminating against the Portugal Quince, what more could a home producer ask, to enable him to glut the market?

At the Annual Meeting of the TRUSTEES, holden, by adjournment, November 14, A. D., 1883, *President* Dewey, *Vice-*

President Parker, with the *Secretary*, were appointed a Committee to prepare and present a Petition to the General Court asking for the Exemption from Taxation of the property of the Society. Concerted action with the Massachusetts Society was advised. Pursuant to that vote, a Petition was seasonably drawn up and submitted to the General Court, being referred in due course to the Committee on Agriculture. *Vice-President* Parker rendered efficient service, by personal interviews with Representatives and Senators; as did also the late lamented Francis B. Hayes, the President of the Massachusetts Society. Particular acknowledgment should however be made of the untiring efforts and cordial zeal of Mr. W. H. Spooner, Representative from a Boston district, whose long connection with the Massachusetts Society might well inspire enthusiasm, as it could not help informing him of the merits of the case. You are aware of the partial success that was attained. The Act is recited here, that it may appear in our Official Transactions and be brought to the direct knowledge of individual members:

COMMONWEALTH OF MASSACHUSETTS.

In the Year One Thousand Eight Hundred and Eighty-Four.

—An Act—

to exempt certain property of Horticultural Societies from Taxation.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by authority of the same, as follows:—

Section 1. Such portions of real estate and buildings, belonging to incorporated Horticultural Societies, as are used for their offices, libraries, and exhibitions, shall be exempt from taxation.

Section 2. This Act shall take effect upon its passage.

House of Representatives: April 16, 1884.

Passed to be enacted: Geo. A. Marden, *Speaker*.

In Senate: April 18, 1884.

Passed to be enacted: Geo. A. Bruce, *President*.

April 19, 1884.

Approved.

GEO. D. ROBINSON.

Our appeal was for justice. We did not originate the policy of exemption from taxation, for any cause soever; since it is coëval with the existence of the Commonwealth. But we did object to an invidious discrimination, whereby it was implied that the culture and development of Flower, Fruit, or Vegetable, is of less consequence than the growth of Corn or Hogs. Since those original laws of exemption were passed, Horticulture has attained to its full stature; and Pomology, its leading branch, assumed the dignity of a Science. The export of Apples alone, while not what it should be, and must inevitably become in the near future, is yet of importance enough to occupy a conspicuous place in the Treasury columns. Cultivation of the Strawberry, the Peach, and the Grape, engages whole communities; constitutes the entire season's traffic of railways; and furnishes employment and sustenance to the population of great States. We asked for the practical recognition of a fact too palpable and plain to be ignored longer. Are you satisfied with the response? Will you content yourselves with this imperfect measure of reparation? Or will you continue the struggle, until you achieve a position of equality with other interests, of no greater consequence, but which are more favored in the eye of the law?

The property of Agricultural Societies is exempted, although used by the Societies themselves for but one or two days in the year. In addition,—they receive a bounty from the State Treasury, designed at first to be an equivalent for the amount appropriated in premiums. What little Horticulture gets, it gets grudgingly, much like the bestowal of cold victuals upon a tramp; and with about an equal suspicion of demerit, on the part of the reluctant donor, in either case.

Now why should not the Exemption, if any, be as absolute for Horticulture as for Priestcraft? Why should Agriculture get gain from leases to an Irish Patron, to Buffalo Bill, or to Technical Foot-Ball; and Horticulture be proscribed for deriving rent from its ground floor, without which source of revenue it could not even exist? Deprived of revenue from our property we could not offer premiums by way of encouragement in experiment or continued trial. It has been our good fortune to have had benefactors, by whose munificence, aided by the frugal

management of our Officers, we were enabled to become the owners of this land and building. Deducting necessary expenses, our whole income is applied, in the language of our Charter, to the "purpose of advancing the science, and encouraging and improving the practice of Horticulture." Our position is, I believe, unique. Alone, among kindred Societies, we make no charge for admission to our Exhibitions; throwing our doors wide open, and inviting all to compete, observe, investigate, and compare. Agricultural Societies, enjoying complete immunity from taxation; receiving a monetary bounty from the State; and sub-letting their property at will; yet allow no person to gaze upon flock, drove, cow, or counterpane, unless he first purchases a ticket of leave. Even the Massachusetts Horticultural Society is less liberal in the diffusion of its beneficent influences than ourselves. You ought never to ask for special and exclusive privileges. But, proffering advantages and instruction to all, without money or price, you should never submit supinely to partial and invidious discrimination against yourselves.

By the death of Clarendon Harris, which occurred on the 12th day of January ult., this Society was deprived of one of its oldest and most valued Members. Few of this audience can know the extent of our indebtedness to him, for assiduous service upon our Committees and as a Trustee: fewer still, how much we owe to his knowledge of Books and the Book-Trade, for the secure foundation upon which our Library was built up. One of my earliest memories is, of that old-fashioned book-store; of the curious Circulating Library, replete with pretty much every thing that the mind of man had yielded to print, from the Mysteries of Udolpho to Mavor's Voyages; a quaint mixture of the fanciful with the useful,—to which a somewhat omnivorous appetite for reading was ever welcome so long as it enjoyed its feast in quiet. Unassuming as was that modest old store, vivid in my recollection with its occasional customer and the droning sound of its primitive ruling-machine,—from it were graduated Loring, Phillips, and Flagg, to give character and tone to the Book-Trade of Boston: Well did it serve its day and generation; never so well after his guiding hand and influence were withdrawn.

Mr. Harris might well inherit a taste for Horticulture. But, whether innate, or acquired, such a taste grew with his years, and ended only with his life at the mature age of Eighty-Four. Interested especially in Floriculture, it was his great delight to enrich our earlier Exhibitions with some new and rare plant that he had developed to unwonted and extreme bloom. His interest in his garden was unabated, to the last.

Elected Librarian, A. D., 1851, when our Books from their number and value, began to require particular care, he continued to hold that office until A. D., 1862, at which date the Library was transferred to its present location and appropriate home in this our own Hall. January 29th, in that year, a Committee, consisting of D. Waldo Lincoln, Emory Banister, and Samuel H. Colton, previously appointed to consider the subject of the best location for the Library, reported among other things, as follows:—

"That they were impressed and surprised with the completeness and great value of the Library, now containing many hundred volumes, among which are works of the most rare and costly description, and which could scarcely be replaced if lost.

For this collection, so extensive and in such perfect condition, the Society are under especial obligation to the Committee on the Library, but more particularly to your present Librarian, Clarendon Harris, Esq., under whose faithful care and judicious management it has grown to its present importance. In addition to his services as Librarian, Mr. Harris has furnished a room for safeguard, free of rent and open at all times to Members of the Society."

Thoroughly informed in all matters relating to the trade, he was enabled to procure Horticultural works, as they were issued, upon terms of peculiar advantage. Largely due to his wise foresight is it, that we now possess so many of the more elaborate and costly volumes, by foreign *savants*, of priceless excellence, yet of such cost as to preclude all idea of their re-issue. He held a firm faith in clear typography, good press-work, and stout if not luxurious binding; yet he did not forego the chance of securing any publication, of intrinsic value, however homely its garb. He did so much that the labor of his successors has been comparatively easy. That he could avail himself of the ready council of Anthony Chase, Isaac Davis, and Frederic William

Paine; to whom that would have been truly a *dies non* on which they failed to take their morning pinch of snuff in his office; detracts nothing from his individual merit.

Being more familiar than most of you with the character and extent of his devotion to your service, I should have been false to my own sense of duty had I omitted to pay this inadequate tribute to the memory of CLARENDON HARRIS.

Our record of official existence bears upon its every page the honored name of PAUL WHITIN. Distance prevented his being a large or frequent exhibitor: but his interest in our work was ever manifest during his regular visits to Worcester, whither he was so often called by his punctual discharge of public trusts. It seemed to enliven and refresh him to come into our Hall upon his way home; and the sight of his benignant features was as much of a treat to others as the interchange of friendly greetings appeared to be to him. He was a keen observer; closely watching the introduction of new varieties of flower or fruit, and retaining to a surprising degree the memory of any characteristic peculiar to each or all. I well remember his pleasant smile when, asked what he thought of the Crescent Strawberry, first placed upon our tables by himself, he replied that it was a variety to be tried less by the taste than scent! He never obtruded his individual opinion, although amply qualified to give it with authority upon any branch of Horticulture. Yet no one was more ready to respond to a call for information, which he could supply at will from the stores wherewith he was so richly endowed. His attendance and services were at our command:—his purse also. For, when the movement to remove, or at least alleviate, our load of debt, was initiated by Hon. Stephen Salisbury, years since, Paul Whitin sympathized cordially in the purpose and, with his brothers, contributed liberally towards the desired end.

At the age of Eighty-Five (85) he passed literally from our active life, without a struggle:* leaving us, for remembrance, a

* He was found lifeless, in bed, Thursday morning, February 7th. On the afternoon of Wednesday (the day before), he had attended a meeting, in Worcester, of the Directors of the Manufacturers' Mutual Fire Insurance Company of whom he was an Associate. E. W. L.

character without blemish or flaw ;—an example free from speck or taint.

The loss sustained by this Society through the death of the *Hon.* STEPHEN SALISBURY; whilom its President, and erst as ever its benefactor; was fittingly noticed at the time, in a most feeling and appropriate tribute to his memory, by our senior surviving ex-President, J. Henry Hill. Some facts stated by him, orally, familiar, as they were and are, to but few, deserve to be put in more permanent shape for an enduring record of appreciative and continuous liberality whereof this Society was the beneficiary.

The legacy from *Hon.* DANIEL WALDO, united with the receipts from Memberships, and some revenue derived from admission to the Annual Exhibitions; the whole managed frugally and wisely by our life-long Treasurer, Frederic William Paine; had encouraged and enabled the Society to venture upon the erection of this, their own Hall. The funds in hand, however, were inadequate to the cost of the land and building; and a loan was indispensable. To secure the sum needed, certain Members became individually responsible: an obligation voluntarily assumed and wherefrom, for that reason if no other, it behoved the Society to discharge them as soon as possible. To accelerate an object so meritorious, Mr. Salisbury, then just entering upon his fourth year as President, made the following unsolicited offer:—

"WORCESTER, *Jan.* 4, 1854.

To the

WORCESTER COUNTY HORTICULTURAL SOCIETY.

Gentlemen.—

For the relief of the Members of the late Building Committee from suretyship for the Corporation debt, and for the increase of the efficiency of the Society by the enlargement of its available means, I offer to pay to Fred'k W. Paine, Esq., your Treasurer, the sum of Three Thousand Dollars, to be applied to the reduction of the Society's debt to such an amount as shall require no other security than the Society's note and a Mortgage of the Horticultural Hall.

I am prepared to make the payment whenever the Society shall signify their acceptance of this offer.

With great respect,

Your obed't servant,

S. SALISBURY."

It scarcely needs to be stated that this "*truly munificent donation*," to quote the phrase of John Milton Earle, *Chairman* of the Committee to whom the proposition was referred, was gratefully accepted. The sureties were thereby released from their liability; and the note of the Corporation, secured by a Mortgage upon its Real Estate, was received, by the County Institution for Savings, as ample guaranty for a loan of Nine Thousand ($9,000.00) Dollars.

Time rolled on; and, Mr. Salisbury being still President, it was found necessary to rebuild the roof and otherwise repair some hurried and imperfect construction. So that, upon his voluntary retirement from office, in 1857, he was obliged in an elaborate review of the financial condition of the Society, notwithstanding the act of munificence just related, to acknowledge an absolute, existing Debt of Ten Thousand Seven Hundred and Eighty ($10,780.00) Dollars. Of that amount, as a second mortgage was not taken, in those days, by any reputable institution, the very considerable sum of Twenty-One Hundred and Thirty ($2,130.00) Dollars had to be obtained upon the personal security of F. W. Paine, George T. Rice, D. Waldo Lincoln, and Mr. Salisbury himself. Wholly solvent; but in nowise, save from good will, bound to become sureties.

The Library was transferred to its present location on the 27th of February, A. D. 1862, bringing with it almost immediately a revival of interest in the objects of the Society and the general pursuits of Horticulture. The number of Members increased rapidly; weekly meetings had a thronged attendance; and everywhere appeared animation where, before, were only indifference and inertia. Of all this Mr. Salisbury was a pleased and intent spectator: indeed to your *Secretary*, then new in office, he confessed as much. But he felt that the operations of the Society were cramped by the burden which it had to carry, and, as was the habit of his life, when his mind was made up that a certain course would be right, he acted accordingly. Of that action, so modest and unassuming, yet effective, the sole Official record is as follows:—

At the Annual Meeting of the Society on Wednesday, Nov.

13, A. D. 1867, On motion of *Hon.* John Milton Earle it was unanimously

"*Resolved*,—that the thanks of the Society be, and they hereby are tendered to Hon. Stephen Salisbury for the renewed evidence of his liberality and of his interest in the success of our efforts, as evinced by the munificent donation to our funds, whereby the Society is placed in a state of comparative pecuniary ease and enabled greatly to extend the sphere of its operations. And that our gratitude is also due to the gentlemen who so liberally co-operated by the gift of time and money."

Beyond that resolution, there is no formal notice of an act whereof, if practically consummated by others, the sum and substance was comprised in the initiation, by Mr. Salisbury, of a movement that relieved this Society from an onerous burden and placed it upon a secure foundation. Ex-President Hill has told you the story, which may well be put in more enduring shape. Our indebtedness had been reduced to about Eight Thousand ($8,000.00) Dollars. Mr. Salisbury proposed, through Mr. Hill, to assume the payment of one-half of that amount if others,—Members and friends of the Society,—would contribute an equal sum. Mr. Hill did not tell you of the voluminous correspondence conducted by himself, nor of the generous responses which he received,—notably from the WHITIN *Brothers*. Personal knowledge enables your *Secretary* to supply that omission, and to testify that without the indefatigable efforts of Mr. Hill, supplemented by the individual solicitations of John C. Ripley, the whole effort would have proved futile. To them may be ascribed all credit for the collection of the moiety of the amount needed; with which Mr. Salisbury, satisfied that it was the utmost that could be done, expressed himself content and carried out his original purpose to that modified extent. By frugality of expenditure, by increase of revenue from our investment since the war, our indebtedness has been steadily diminished; although the decrease was checked, for a time, by the necessity of an addition to our real estate. The absolute extinction of all existing liabilities should be kept steadily in view as our settled policy, not only because wise in itself, but out of regard for the memory of those who uniformly advocated and contributed toward that end.

Mr. Salisbury was elected Vice-President upon the first formation of the Society and, from that time until the day of his death, was with scarcely an intermission in your official service. He was diligent and punctual as in every thing else that he undertook; always preparing a written report when acting as Chairman of what others might deem an unimportant Committee. He was President from 1851 to 1857, when he declined a re-election. In an Address to the Society, A. D., 1853, after his return from a European tour; he reviewed, in detail, the condition of the Society, stating matters concerning its origin not elsewhere recorded, but of incalculable value to our future historian. The hope of securing for preservation, beyond a living memory, any further facts that might be within his recollection, prompted the following correspondence:—

"WORCESTER COUNTY HORTICULTURAL SOCIETY.

Hall of Flora. *May* 25, 1881.

HON. STEPHEN SALISBURY:

My Dear Sir.—

Once, in conversation, you remarked to me that William Lincoln did more to found and build up the Horticultural Society than any other person. I have paid mortuary tribute, where I thought it due, as occasion served or required.

Would it be imposing too great a task upon a life-long devotion to ask and expect you to note down your recollections of the first organization of our Society? No one but yourself is familiar with all the facts. Were I capable, otherwise, my long absence in Illinois interrupted my knowledge of local history. And I think that you will agree with me that the Horticultural Society has been no inconsiderable factor in the growth and development of Worcester.

I re-iterate: no one but yourself can do this. Ought you not?

Believe me very truly and sincerely,

EDWARD W. LINCOLN."

"*Worcester*, *May* 28, 1881.

EDWARD W. LINCOLN, ESQ.:

My Dear Sir.—

I regret and I ought to be ashamed that I am not able to give you any particulars of the organization and first movements of the Horticultural Society. It is a proof that I had little share in that good work. I can confidently repeat the remark, you say I once made, that

Mr. William Lincoln did more to found and build up that Society than any other person. Dr. Green, Mr. F. W. Paine, and Mr. John M. Earle, were prominent and did special things. As I remember, Mr. Paine obtained a large number of specimen Pears from Salem, which were more numerous than excellent; yet they were instructive and encouraging. The rest of us followed Mr. Lincoln and could not escape some useful service. I am glad to know that you are attempting to gather the history of a Society that has been always useful to the growth and character of our city; in its small beginning and in the glory of the latter day, in which the hand of a Lincoln again appears.

Very sincerely yours,

S. Salisbury."

"My way of life
Is falling into the sear, the yellow leaf;
And that which should accompany old age,
As honour, love, obedience, troops of friends,
I must not look to have;"—

So wrote the Poet of All Time,—in the despairing monologue of that mediæval Knight who, as warrior fought his own battles; and, as politician, casting an anchor to windward, wrecked his ship to the loss of both kingdom and life.

The ambition of Horticulture, like the tendency of her pursuits, is toward every art that maketh for Peace. She is never aggressive,—if stalwart. May it not be said of her, as of Wisdom, in the phrase of him who wrote as but One spake,—

"Length of days is in her right hand; and in her left hand riches and honor.

"Her ways are ways of pleasantness and all her paths are peace.

"She is a tree of life to them that lay hold upon her."

Is Horticulture synonymous with length of days? Stephen Salisbury attained to his eighty-seventh year. Clarendon Harris was eighty-four; and Paul Whitin eighty-five. Of those whose portraits adorn our Hall all, save one whose career was cut short by an accident, had far transcended the limit of the Psalmist. Let those, then, who love life for its own sake; or for the opportunities whereby it may be made fruitful; like their exemplars,

to whom impartial, if halting, tribute has just been attempted; commend to themselves the quaint advice of old John Gerard* well nigh Three Centuries since:—

"Forward in the name of God, graffe, set, plant, and nourish up trees in every corner of your ground; the labour is small, the cost is nothing, the commodity is great: Your selues shall have plenty, the poor shall have somewhat in time of want to relieve their necessities, and God shall reward your good mindes and diligences."

All which is respectfully submitted,

by

EDWARD WINSLOW LINCOLN,

Secretary.

HORTICULTURAL HALL,

Worcester, Massachusetts, November 5, A. D., 1884.

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* Historie of Plants, 1597.

APPENDIX.

Boston, March 3, 1884.

EDWD. W. LINCOLN, ESQ.,

Secretary Worcester Co. Horticultural Society.

My Dear Sir.—

One of the members of the Agricultural Committee, Mr. W. H. Spooner, has handed me the enclosed memorandum for the proposed bill to relieve Horticultural Societies from taxation. Some of the committee think that the building, or portions of building which are let as stores or for other business purposes, should not be exempt from taxation. Therefore, without consultation, they send in the memorandum I send you with this, asking if such a bill as the enclosed would be satisfactory. My reply is that I think it quite indefinite, and open to the objection that it covers more than they desire, and does not give us anything, according to its construction.

I send the same to you for your and Judge Dewey's consideration. The committee are favorable to our application for some relief, but are very doubtful if they can get a bill passed exempting unconditionally all the estates of Horticultural Societies from taxation.

Will you please attend to this matter?

Faithfully yours,

FRANCIS B. HAYES.

On motion of Mr. Sessions, it was voted to frame a bill exempting Horticultural Societies from taxation, on such property as may be used for the purposes for which they were organized.

How would the following do for a bill?

"The estate, both real and personal, of incorporated Horticultural Societies, shall be exempt from taxation, on such portions thereof as may be used for the purposes for which they were organized."

WORCESTER COUNTY HORTICULTURAL SOCIETY.

Hall of Flora, *Worcester, Mass., March* 6, *A. D.*, 1884.

HON. FRANCIS B. HAYES, *Prest.:*

Dear Sir.—

I have not yet been able to see Judge Dewey,* but Vice-President Parker, of our Committee, and others of our Trustees, unite with myself in concurrence with your opinion. It would be emphatically a matter of construction,—in every case by Assessors whose chief aim is, to tax all that they can reach. The Statutes now require that "portions of such" (religious) "houses appropriated for purposes other than religious worship, shall be taxed at the value thereof to the owners of the houses."

Not one cent has ever been taxed, in Worcester, under that explicit enactment. But then we should not have the "benefit of Clergy"!

Our Stores are inseparable from our Hall. Take them away and the building falls. The income from them supplies the means wherewith to prosecute the high purposes for which we were chartered. For such purposes, solely, is it used.

Would the Committee enact that "the land of Agricultural Societies shall be taxed to such Societies, for such portions of the year as it is not appropriated for Agricultural purposes exclusively?"†

Our Society ask for equality before the law and to be relieved from invidious discrimination. The insertion of the words—"and Horticultural"—after "Agricultural," in the existing Statute, would satisfy their wishes.

Very truly and sincerely your friend,

EDWARD WINSLOW LINCOLN,

Secretary.

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* Absent, in Cuba.

† It has always been a mystery to us, why any property which has to have fire, police, and general municipal protection, should be exempt from taxation, except, of course, such as belongs to the municipal corporation. Voluntary charity is very commendable; but to force others to help you in your voluntary work is an absurdity unworthy of an intelligent people. The People who advocate the public support of devotional and charitable institutions, by relief from taxation, make nothing by it. The taxation of Philadelphia, and New York, would be perhaps one-fourth lower, only for the enormous amount of exempt property. Therefore, even those who want to give, and to force those who do not want to give, pay one-fourth more taxes than they would do only for this exemption idea.—*Gardener's Monthly (Phila.), May No., pp.* 156—.

REPORT OF THE LIBRARIAN.

To the Members of the

Worcester County Horticultural Society:

Your Librarian respectfully submits the following report for the year just closed. The additions to the Library by purchase or gift are as follows:

Transactions and reports of the Fruit Growers' Association and International Show Society of Nova Scotia.

Address, at the Nineteenth Session of the American Pomological Society at Philadelphia; 1883; by M. P. Wilder.

Reports of the Town Officers, Leicester; 1883; E. W. Lincoln.

Auditor's Report of the City of Worcester; 1882.

Encouragement to the Sorghum and Beet Sugar Industry; Henry Phelps.

Observations on the Soils and Products of Florida; Henry Phelps.

The Silk Worm; being a brief manual of instruction for the production of Silk.

An Investigation of the composition of American Wheat and Corn.

Forestry; a Magazine for the country; 1883.

Banquet to Marshall P. Wilder.

Landreth's Rural Register.

The Ladies' Floral Cabinet; 1883; Ralph H. Waggoner.

The English Flower Garden; by Wm. Robinson; Society.

The Journal of Horticulture: Vols. 6 and 7; New Series; Society.

Flora of the Southern States; by Chapman; Society.

Report of the American Pomological Society, Session 1883.

Preliminary Circular respecting the Exhibition of Education at the World's Industrial and Cotton Centennial Exposition.

Papers on Government Timber Lands and American Fruit Trees.

Circular No. 3, 1884, on the Illiteracy in the United States in 1870 and 1880; by Charles Warren, M.D.

Circular No. 2, 1884; The Teaching and Practice of Shorthand; by Julius E. Rockwell.

Report of the Department of Agriculture; 1883; G. F. Hoar.

Report of the Department of Agriculture; 1883; E. W. Lincoln.

Special Report, No. 4, Department of Agriculture.

Special Report, No. 9, Department of Agriculture.

Special Report, Microscopic Observation; by Thos. Taylor.

Special Reports of the Department of Agriculture; from No. 1, 1877, to No. 65, 1883; in 6 bound Vols.; H. Phelps.

Synoptical Flora of North America; Vol. 1. Pt. 2; Asa Gray; Society.

Report of the Commissioner of Education; 1883, 1884.

Revue Horticole; 1883; Society.

Gardening Illustrated; 1884; Society.

Vick's Monthly Magazine; 1884; Society.

The Garden; an Illustrated weekly journal; 1884; Society.

The Gardener's Chronicle; Vol. 17; 1884; Society.

The Agricultural Gazette; London; 1884; Society.

The American Agriculturist; 1884; Society.

The Gardener's Monthly; Vol. 26; 1884; Society.

The Country Gentleman; Vol. 49; 1884; Society.

The Fruit Recorder; 1884; Society.

The Massachusetts Ploughman; 1884; *Courtesy* of ye Ploughman.

The Worcester Directory; 1884; Society.

Woods and Forests; a weekly Illustrated Journal of Forestry; London; Society.

All of which is respectfully submitted.

CHARLES E. BROOKS,

Librarian.

HALL OF FLORA,

November 5, 1884.

PREMIUMS AND GRATUITIES

AWARDED FOR 1884.

Wednesday, March 5.

No. 1. Azalea Indica, 3 plants in bloom. No entry; extremely cold.

No. 2. Azalea Indica, 1 plant in bloom. No awards, plants not large enough.

No. 3. Primula Sinensis, 4 plants in bloom. 1st premium, Wm. T. Merrifield, $3.

No. 4. Primula Sinensis, 1 plant in bloom. 1st premium, Wm. T. Merrifield, $1.

Gratuities.

Hyacinths, collection, W. W. Cook, $1.

Camellias, display of blooms, Mrs. Thomas Ward, $1.

Violets, bouquet, Mrs. Charles E. Parker, $1.

Anthurium Scherzerianum, plant, Mrs. T. L. Nelson, $1.

Cut Flowers, stand, Mrs. George H. Rich, $1.

Two plants, Mrs. W. E. Sargent, 50c.

Azalea Indica, 1 plant, A. A. Hixon, $1. Mrs. C. E. Brooks, 50c.

No. 6. Apple. Tompkins Co. King. 1st premium, William Eames, $1.50.

Gratuities.

No. 8. Apple. Rochester, William Eames, $1; Mrs. Josiah Goddard, 50c.

No. 9. Cabbage, Brunswick, 3 specimens. 1st premium, Simon E. Fisher, $1.50; 2d premium, Charles E. Parker, $1.

No. 11. Celery, 6 heads. 1st premium, Joseph Brierly, $1.50; 2d premium, Henry T. Reynolds, $1.

Gratuities.

Rhubarb, Linnæus, George H. Rich, $1.

Squash, Butman, Simon E. Fisher, 50c.

Wednesday, March 12.

No. 2. Azalea Indica, 1 plant in bloom. 1st premium, W. W. Cook, $3.

No. 12. Cinerarias, in bloom, 4 plants. 1st premium, State Lunatic Hospital, $3; 2d premium, W. W. Cook, $2; 3d premium, Wm. T. Merrifield, $1.

No. 13. Hyacinths, in bloom, 6 plants. 1st premium, H. B. Watts, $3; 2d premium, A. A. Hixon, $2; 3d premium, W. W. Cook, $1.

No. 14. Hyacinth, in bloom, 1 plant. 1st premium, A. A. Hixon, $1; 2d premium, W. W. Cook, 50c.

Gratuities.

Cinerarias, display, State Lunatic Hospital, $3.

Hyacinth and Cut Flowers, display, A. A. Hixon, $2.

No. 18. Apple. Northern Spy. 2d premium, William Eames, $1.50.

No. 20. Cabbage, Savoy, 3 specimens. 3d premium, Simon E. Fisher, 50c.

No. 21. Squash, Hubbard, 3 specimens. 2d premium, Luther R. Eames, $1.

No. 22. Turnip, White Egg, 12 specimens. 1st premium, Simon E. Fisher, $1.50; 2d premium, Luther R. Eames, $1.

Wednesday, March 19.

No. 23. Cyclamen, in bloom, 4 plants. 1st premium, A. A. Hixon, $3.

No. 24. Cyclamen, in bloom, 1 plant. 1st premium, A. A. Hixon, $1.50; 2d premium, George H. Rich, $1.

No. 25. Cut Flowers, stand of 24 blooms or clusters distinct. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, Mrs. Charles E. Parker, $1.

Gratuities.

Cut Flowers, stand, Mrs. Thomas Ward, $1.

Pansies, stand, Mrs. Charles E. Parker, 50c.

Narcissus, display, Woolson & Co., Passaic, New Jersey, $5.

No. 26. Apple. Baldwin. 1st premium, Charles E. Parker, $1.50; 2d premium, William Eames, $1; 3d premium, Luther R. Eames, 50c.

No. 27. Apple. Yellow Belleflower. 3d premium, A. A. Hixon, 50c.

No. 29. Apple. Greening, R. I. 1st premium, Mrs. Austin W. Ward, $1.50; 2d premium, Charles E. Parker, $1; third premium, Luther R. Eames, 50c.

No. 32. Cabbage, Red Dutch, 3 specimens. 1st premium, George H. Rich, $1.50; 2d premium, Simon E. Fisher, $1.

No. 34. Turnip, White Swede, 6 specimens. 2d premium, Simon E. Fisher, $1.

Gratuity.

Squash, Essex Hybrid, H. B. Watts, $1.

Wednesday, March 26.

No. 35. Arum (Richardia), in bloom, collection grown in pot or tub not exceeding 16 in. 1st premium, Charles E. Parker, $3; 2d premium, George H. Rich, $2.

No. 36. Arum (Richardia). One bloom, with foliage, the largest. 1st premium, Charles D. Thayer, $1; 2d premium, Charles E. Parker, 50c.

No. 37. Hand Bouquet. 1st premium, Charles D. Thayer, $3; 2d premium, Miss Mabel Parker, $2; 3d premium, Mrs. A. A. Hixon, $1.

Gratuities.

Asparagus Plumosus, plant, Mrs. T. L. Nelson, 50c.

Hydrangea, Thomas Hogg, plant, Mrs. W. H. Sherman, 50c.

Choristema Hispida, plant, A. A. Hixon, 50c.

Pansies, basket, Mrs. Charles E. Parker, 50c.

No. 38. Apple. Peck's Pleasant. 1st premium, George C. Rice, $1.50.

No. 40. Apple. Tallman Sweet. 2d premium, William Eames, $1.

No. 43. Beets, Turnip, 12 specimens. 1st premium, George H. Rich, $1.50; 2d premium, Charles E. Parker, $1; 3d premium, F. J. Kinney, 50c.

No. 44. Carrot, Intermediate, 12 specimens. 1st premium, E. A. Bartlett, $1.50; 2d premium, S. H. Record, $1; 3d premium, George H. Rich, 50c.

No. 45. Lettuce, 6 heads. 1st premium, E. A. Bartlett, $2.

Gratuity.

Salsify, J. L. Peters, 50c.

Wednesday, April 2.

No. 46. Basket Flowers. 1st premium, Mrs. Charles E. Parker, $3; 2d premium, W. W. Cook, $2: 3d premium, Charles A. Keyes, $1.

No. 47. Stand Flowers. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, A. A. Hixon, $1.

Gratuities.

Azalea, Prince Albert, plant, Mrs. S. C. Kendall, 50c.

Azalea, Imported 1883, Cut blooms, Mrs. Thomas Ward, 50c.

Basket Flowers, Mrs. A. A. Hixon, $1. Too large for competition.

No. 48. Apple, any variety, gratuities. Collection 4 varieties. William Eames, $1.

No. 50. Parsnep, 12 specimens. 1st premium, Mrs. Austin Ward, $2; 2d premium, Geo. H. Rich, $1.50; 3d premium, Simon E. Fisher, $1.

No. 51. Radish, 2 bunches of 6 each. 1st premium, Charles E. Parker, 2; 2d premium, F. J. Kinney, $1.50.

Wednesday, April 9.

No. 52. Zonale Geraniums, in bloom, 4 plants. 1st premium, Wm. T. Merrifield, $3; 2d premium, W. W. Cook, $2; 3d premium, Mrs. Charles E. Brooks, $1.

No. 53. Pot Plants, in bloom, gratuity. A. A. Hixon, $3; W. W. Cook, $1.50.

Cut Flowers, stand, Mrs. S. H. Record, $1.

Azalea, basket, Mrs. Thomas Ward, $1.

No. 54. Apple. Russet, Golden. 1st premium, Luther R. Eames, $1.50.

No. 56. Apple. Russet, Roxbury. 1st premium, Luther R. Eames, $1.50; 2d premium, William Eames, $1; 3d premium, S. H. Record, 50c.

No. 58. Pear. Any variety, gratuity. Duchesse de Bordeaux, Mrs. Henry Phelps, $1.

No. 59. Lettuce, 6 heads. 2d premium, Charles E. Parker, $1.

No. 60. Potato, 12 specimens. 1st premium, White Star, H. B. Watts, $1.50; 2d premium, Mass. Perfection, Joseph Brierly, $1; 3d premium, Clark's No. 1, Simon E. Fisher, 50c.

No. 61. Squash, 3 specimens. 1st premium, Essex Hybrid, H. B. Watts, $1.50.

Wednesday, April 16.

No. 62. Begonia, in bloom, one plant. 1st premium, W. W. Cook, $3; 2d premium, Mrs. T. L. Nelson, $2; 3d premium, A. A. Hixon, $1.

No. 63. Cut Flowers, distinct varieties, stand. 1st premium, W. W. Cook, $3; 2d premium, A. A. Hixon, $2.

Gratuity.

Cut Flowers, not distinct, stand, Mrs. Charles E. Parker, $1.

No. 64. Apple. Any variety, gratuity. Baldwin, Hubbardston, one plate of each, Luther R. Eames, $1.50.

No. 66. Parsnep, 12 specimens. 1st premium, Hollow Crown, Mrs. Austin Ward, $1.50; 2d premium, Simon E. Fisher, $1; 3d premium, George H. Rich, 50c.

No. 67. Rhubarb, 12 stalks. 1st premium, S. H. Record, $1.50; 2d premium, George H. Rich, $1.

Wednesday, April 23.

No. 68. Pansies, no duplicates. 1st premium, Mrs. Charles E. Parker, $3; 3d premium, W. W. Cook, $1.

No. 69. Cut Flowers. Handle Basket, low oval, not to exceed 15 inches in diameter. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. Charles E. Parker, $1.

Gratuities.

Roses, stand, S. H. Record, $1.

Cut Flowers, stand, A. A. Hixon, $1.

Petunias, stand, A. A. Hixon, $1.

Amaryllis, plant, Richardia Maculata, plant, Mrs. E. H. DeLand, 50c.

Azalea, 3 plants, Mrs. Thomas Ward, 50c.

Epigæa Repens, 2 bouquets, Arba Pierce, $1.

No. 70. Apple. Any variety, gratuity. Baldwin. William Eames, $1.

No. 71. Dandelion, cultivated, half-peck. 1st premium, S. H. Record, $1.50; 2d premium, Charles E. Parker, $1; 3d premium, Mrs. Henry Phelps, 50c.

No. 72. Spinach, half-peck. 1st premium, S. H. Record, $1.50.

Gratuity.

Lettuce, Mrs. E. H. DeLand, $1.

Wednesday, April. 30.

No. 73. Pot Plants, in bloom. Gratuity, if merited. Adin A. Hixon, $3; Mrs .Charles E. Brooks, $2; F. H. Wesson, $1.50.

Gratuities.

Cut Flowers, stand, Mrs. S. H. Record, $1.50.

Cut Flowers, stand, Adin A. Hixon, $1.

Cut Flowers, Mrs. E. H. DeLand, 50c.

No. 75. Lettuce, 6 heads. 1st premium, Charles Greenwood, $1.50; 2d premium, Mrs. E. H. DeLand, $1; 3d premium, Charles E. Parker, 50c.

No. 76. Rhubarb, 12 stalks. 1st premium, S. H. Record, $1.50; 2d premium, Mrs. Austin Ward, $1.

Wednesday, May 7.

No. 77. Pansy, in bloom, 6 plants. 1st premium, Charles E. Parker, $3; 2d premium, W. W. Cook, $2; 3d premium, Charles D. Thayer, $1.

No. 78. Bouquet, Hand, not to exceed 9 inches in diameter. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Charles E. Parker, $2; 3d premium, Mrs. Thomas Ward, $1.

Gratuities.

Hyacinth, stand, A. A. Hixon, $1.50.

Cut Flowers, stand, Mrs. S. H. Record, $1.

Cut Flowers, stand, Mrs. L. Morey, 50c.

No. 79. Asparagus, 2 bunches, 12 stalks each. 1st premium, Willard F. Pond, $1.50; 2d premium, S. H. Record, $1; 3d premium, R. A. Abbott, 50c.

No. 80. Dandelion, cultivated, half-peck. 1st premium, S. H. Record, $1.50; 2d premium, E. A. Bartlett, $1; 3d premium, Charles E. Parker, 50c.

No. 81. Spinach, half-peck. 1st premium, Willard F. Pond, $1.50; 2d premium, S. H. Record, $1.

Wednesday, May 14.

No. 82. Basket, oval, on stand, with handle, not to exceed 15 inches in diameter. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. Charles E. Parker, 1.

No. 83. Bulbs, Hardy, open culture, stand. 1st premium, O. B. Hadwen, $3; 2d premium, Mrs. T. L. Nelson, $2; 3d premium, H. B. Watts, $1.

No. 84. Hyacinths, open culture. Display. 1st premium, O. B. Hadwen, $3; 2d premium, Charles E. Parker, $2.

Gratuities.

Cut Flowers, stand, Mrs. Charles E. Brooks, $1.50.

Cut Flowers, stand, A. A. Hixon, $1.

Cut Flowers, stand, S. H. Record, $1.

Amaryllis and Cactus, plants, J. F. Smith, $1.

No. 85. Asparagus, 2 bunches, 12 stalks each. 1st premium, R. A. Abbott, $1.50; 2d premium, S. H. Record, $1; 3d premium, Willard F. Pond, 50c.

No. 86. Rhubarb, 12 stalks. 1st premium, Mrs. M. E. Woodward, $1.50; 2d premium, Mrs. Josiah Goddard, $1; 3d premium, Francois W. Hixon, 50c.

Wednesday, May 21.

No. 87. Cut Flowers, distinct varieties, stand. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, A. A. Hixon, $2.

No. 88. Pelargoniums, Fancy and Show, in bloom, 4 plants, distinct varieties. 1st premium, Mrs. S. H. Record, $3.

No. 89. Tulips, open culture, display. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Austin W. Ward, $2; 3d premium, Mrs. A. A. Hixon, $1.

Gratuities.

Coleus, in pots, F. H. Wesson, $1.

Amaryllis, 1 plant, Mrs. E. D. McFarland, 50c.

Cut Flowers, stand, Mrs. L. Morey, 50c.

No. 90. Vegetable, gratuities, 7 varieties, S. H. Record, $1.

Two varieties Lettuce, Allie W. Hixon, $1.

Wednesday, May 28.

No. 91. Cut Flowers, Hardy plants and Shrubs, open culture, display. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, Mrs. Thomas L. Nelson, $2; 3d premium, Mrs. L. Morey, $1.

No. 95. Radish, 12 specimens. 1st premium, Joseph Brierly, $1.50.

No. 96. Onion, 2 bunches, 6 in each. 1st premium, Charles Greenwood, $1.50; 2d premium, Joseph Brierly, $1.

Wednesday, June 4.

No. 97. Fuchsia, in bloom, distinct varieties, 4 plants. 1st premium, State Lunatic Hospital, $3; 2d premium, W. W. Cook, $2; 3d premium, Mrs. T. L. Nelson, $1.

No. 98. Iris, display. 1st premium, Mrs. Simon E. Fisher, $3; 2d premium, Mrs. L. Morey, $2; 3d premium, Mrs. W. E. Sargent, $1.

No. 99. Vegetable, gratuity. 4 varieties, Spinach, Lettuce, Rhubarb, Asparagus, S. H. Record, $1.50.

Two varieties, Lettuce and Onions, Joseph Brierly, $1.

Asparagus, 3 bunches, Willard F. Pond, $1.

Lettuce, Allie W. Hixon, 50c.

No. 100. Aquilegia (Columbine). 2d premium, Mrs. Henry Phelps, $2; 3d premium, Mrs. A. A. Hixon, $1.

No. 101. Cut Flowers, the varieties of any species must not exceed three, one stand. 1st premium, A. A. Hixon, $3; 2d premium, George H. Rich, $2; 3d premium, Mrs. S. H. Record, $1.

No. 102. Cut Flowers, one vase, the specimens not to be tied or wired. 1st premium, Mrs. Charles E. Parker, $2; 2d premium, Mrs. S. H. Record, $1.

Gratuities.

Azalea, display, O. B. Hadwen, $2.

Clematis, display, Mrs. Thomas Ward, $2.

Cut Flowers, stand, Mrs. L. Morey, $1.

Fuchsia, plant, George H. Rich, 50c.

No. 104. Beets, Early, 12 specimens. 1st premium, Charles E. Parker, $1.50; 2d premium, Willard F. Pond, $1.

Gratuity.

Strawberry, 1 plate, Capt. Jack, Simon E. Fisher, $1.

Wednesday, June 18.

No. 107. Roses, 6 blooms or clusters. 1st premium, Mrs. Charles E. Brooks, $3.

No. 109. Roses, basket or dish. 1st premium, Mrs. Thomas Ward, $2; 2d premium, Mrs. T. L. Nelson, $1.

No. 110. Dianthus Barbatus, Sweet William, stand. 1st premium, Mrs. F. H. Merrifield, $3; 2d premium, Mrs. Simon E. Fisher, $2.

Gratuities.

Pæonia, display, Mrs. Thomas Ward, $2.

Cut Flowers, stand, Mrs. S. H. Record, 50c.

No. 113. Strawberry, Crystal City, 25 berries, flat. 1st premium, F. J. Kinney, $1.50; 2d premium, R. A. Abbott, $1.

Gratuity.

Strawberry, 25 berries, flat, Duchess, F. J. Kinney, $1.

No. 116. Peas, half-peck. 1st premium, Mrs. Austin W. Ward, $2; 2d premium, Adin A. Hixon, $1.50; 3d premium, F. J. Kinney, $1; 4th premium, Simon E. Fisher, 50c.

No. 117. Lettuce, 6 heads. 1st premium, Hanson, F. J. Kinney, $1.50; 2d premium, Tennis Ball, Charles Greenwood, $1; 3d premium, Imperial Head, Joseph Brierly, 50c.

No. 118. Spinach, half-peck. 1st premium, F. J. Kinney, $1.50; 2d premium, S. H. Record, $1; 3d premium, Willard F. Pond, 50c.

Gratuity.

Cucumber, S. H. Record, $1.

Wednesday, June 25.

No. 106. Roses, Hybrid Perpetual, distinct named varieties, 12 blooms or clusters, outdoor culture. 1st premium, O. B. Hadwen, $4; 2d premium, Miss Abbie M. Lovell, $3.

No. 107. Roses, 6 blooms or clusters. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, O. B. Hadwen, $2; 3d premium, Miss Abbie M. Lovell, $1.

No. 108. Roses, named varieties, stand. 1st premium, Mrs. T. L. Nelson, $5; 2d premium, Miss Abbie M. Lovell, $3; 3d premium, Mrs. Charles E. Brooks, $2.

No. 111. Digitalis, Foxglove, display. 1st premium, Mrs. Thomas Ward, $2; 2d premium, Mrs. Charles E. Brooks, $1.

No. 112. Campanula Media, Canterbury Bell. 1st premium, Charles E. Parker, $2; 2d premium, Adin A. Hixon, $1.

No. 120. Hydrangea Otaksa, 1 plant in bloom. 1st premium, S. H. Record, $2; 2d premium, George H. Rich, $1.

No. 122. Basket, oval, flat, not to exceed 18 inches. Amateur. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. S. H. Record, $2; 3d premium, Mrs. L. Morey, $1.

No. 123. Basket, Florist. 1st premium, W. W. Cook, $3; 2d premium, Charles E. Parker, $2; 3d premium, Mrs. Thomas Ward, $1.

No. 124. Bouquet, Parlor, Amateur. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. S. H. Record, $2; 3d premium, Mrs. M. E. Woodward, $1.

No. 125. Bouquet, Parlor, Florist. 1st premium, W. W. Cook, $3; 2d premium, Charles E. Parker, $2.

No. 126. Strawberry, 25 berries, flat, Bidwell. 1st premium, Mrs. Austin W. Ward, $1.50; 2d premium, F. J. Kinney, $1; 3d premium, Charles Greenwood, 50c.

No. 127. Strawberry, 25 berries, flat, Charles Downing. 1st premium, F. J. Kinney, $2; 2d premium, William H. Earle, $1.50; 3d premium, Mrs. Josiah Goddard, $1; 4th premium, Joseph Brierly, 50c.

No. 128. Strawberry, 25 berries, flat, Crescent. 2d premium, William H. Earle, $1.

No. 129. Strawberry, 25 berries, flat, Cumberland Triumph. 1st premium, F. J. Kinney, $1.50; 2d premium, Simon E. Fisher, $1.

No. 131. Strawberry, 25 berries, flat, Sharpless. 1st premium, Mrs. Josiah Goddard, $2; 2d premium, F. J. Kinney, $1.50; 3d premium, Joseph Brierly, $1; 4th premium, Simon E. Fisher, 50c.

No. 134. Strawberry, 50 berries, flat, any variety, gratuity.

Miners, F. J. Kinney, $1.50.

Sharpless, F. J. Kinney, $1.

Windsor Chief, Mrs. Josiah Goddard, 50c.

Seneca and Warren, William H. Earle, $1.

Cherries, Mrs. L. Morey, 50c.

No. 135. Beets, summer, turnip-rooted, 12 specimens. 1st premium, Charles Greenwood, $2; 2d premium, Mrs. A. W. Ward, $1.50; 3d premium, S. H. Record, $1.

No. 136. Peas, American Wonder, half-peck. 1st premium, Charles Greenwood, $2; 2d premium, Mrs. A. W. Ward, $1.50; 3d premium, George M. Pierce, $1.

No. 137. Peas, McLean's Advancer, half-peck. 1st premium. Mrs. A. W. Ward, $2; 2d premium, S. H. Record, $1.50.

Gratuities.

Petunia, stand, W. T. Merrifield, $2.

Campanula Media, stand, Mrs. Thomas Ward, $1.

Orchis, stand, Arba Pierce, $1.

Roses, basket, Mrs. Henry Phelps, $1.

Lilies, vase, Adin A. Hixon, $1.

Wednesday, July 2.

No. 140. Cut Flowers. For the best arranged stand, without restriction as to foliage, varieties, or quantity of flowers. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. Charles E. Brooks, $1.

No. 141. Hardy Flowers, Biennials and Perennials, stand. 1st premium, H. B. Watts, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, Mrs. T. L. Nelson, $1.

Gratuities.

Antirrhinum, stand, Mrs. S. E. Fisher, 50c.

Sweet William, stand, Mrs. C. L. Blake, 50c.

Sweet William, stand, Mrs. L. Morey, 50c.

Pansies, stand, Mrs. S. H. Record, 50c.

No. 142. Strawberry, 25 berries, flat, Bidwell. 1st premium, Mrs. Austin W. Ward, $2; 2d premium, F. J. Kinney, $1.50; 3d premium, Simon E. Fisher, $1.

No. 143. Strawberry, 25 berries, flat, Glendale. 1st premium, F. J. Kinney, $1.50; 2d premium, Simon E. Fisher, $1.

No. 144. Strawberry, 25 berries, flat, Jucunda. 1st premium, F. J. Kinney, $2.

No. 145. Strawberry, 25 berries, flat, Lincoln. 1st premium, F. J. Kinney, $1.50; 2d premium, Simon E. Fisher, $1; 3d premium, William H. Earle, 50c.

No. 146. Strawberry, 25 berries, flat, Manchester. 1st premium, Mrs. Austin W. Ward, $1.50; 2d premium, F. J. Kinney, $1; 3d premium, William H. Earle, 50c.

No. 147. Strawberry, 25 berries, flat, Miner's Great Prolific. 1st premium, F. J. Kinney, $2; 2d premium, Simon E. Fisher, $1.50.

No. 149. Strawberry, 25 berries, flat, any other variety, gratuity. Jersey Queen, F. J. Kinney, $1.50.

James Vick, F. J. Kinney, $1.

Windsor Chief, Mrs. Josiah Goddard, 50c.

No. 150. Strawberry, 50 berries, flat, gratuity, any variety.

Sharpless, Mrs. Josiah Goddard, $2.

Sharpless, F. J. Kinney, $1.50.

Miner's Prolific, F. J. Kinney, $1.

Jersey Queen, F. J. Kinney, 50c.

Gratuities.

Cherry, Coe's Transparent and Black Tartarian, George M. Pierce, $1.

Cherry, Black Tartarian, Harvey G. Upham, 50c.

Raspberry, Brandywine, Mrs. Josiah Goddard, 50c.

No. 152. Pea, Champion of England, half-peck. 2d premium, Mrs. Austin W. Ward, $1.50.

No. 153. Pea, Yorkshire Hero, half-peck. 3d premium, Mrs. Austin W. Ward, $1.

No. 154. Pea, any other variety, half-peck, gratuity. McLean's Advancer. Joseph Brierly, $1.50.

American Wonder, S. H. Record, $1.

Wednesday, July 9.

No. 155. Iris Kæmpferi, display. 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, Mrs. Charles E. Parker, $1.

No. 156. Zonale Geraniums, stand, 1 truss in a bottle. 1st premium, Adin A. Hixon, $3.

No. 157. Cut Flowers, 24 named varieties. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. Charles E. Brooks, $1.

No. 158. Lilium Candidum, 12 spikes. 1st premium, Newell Wood, $3; 2d premium, H. B. Watts, $2; 3d premium, Charles E. Parker, $1.

No. 159. Red Raspberries, 1 quart, Brandywine. 1st premium, F. J. Kinney, $1.50.

No. 161. Raspberries, Black Cap, 1 quart, Davison's Thornless. 1st premium, Mrs. Henry Phelps, $1.50; 2d premium, Mrs. Josiah Goddard, $1; 3d premium, F. J. Kinney, 50c.

No. 162. Raspberries, Black Cap, 1 quart, Doolittle. 1st premium, Thomas A. Dawson, $1.50; 2d premium, F. J. Kinney, $1; 3d premium, Mrs. Josiah Goddard, 50c.

No. 163. Cherry, any variety, 1 quart. 1st premium, Black Tartarian, Mrs. Chester Bancroft, $1.50; 2d premium, Gov. Wood, S. H. Record, $1; 3d premium, Tradescant's Black Heart, H. G. Upham, 50c.

No. 164. Currant, 1 quart, Red Dutch. 1st premium, Daniel C. Tourtellot, $1.50; 2d premium, F. J. Kinney, $1; 3d premium, S. H. Record, 50c.

No. 165. Currant, 1 quart, White Grape. 1st premium, F. J. Kinney, $1.50; 2d premium, Mrs. Austin W. Ward, $1; 3d premium, George M. Pierce, 50c.

No. 166. Currant, 1 quart, White Dutch. 1st premium, Newell Wood, $1.50; 2d premium, Wm. G. Maynard, $1; 3d premium, Thomas A. Dawson, 50c.

No. 167. Currant, 1 quart, gratuity, any other variety. Versaillaise, Newell Wood, $1.50.

Cherry, Wm. H. Earle, $1.

Fay's Prolific, Mrs. Austin W. Ward, 50c.

No. 168. Strawberry, 25 berries, flat, gratuity, any variety. Jersey Queen, F. J. Kinney, $1.50.

Bidwell, Mrs. Austin W. Ward, $1.

James Vick, F. J. Kinney, 50c.

No. 169. Beets, Egyptian, 12 specimens. 1st premium, E. A. Bartlett, $2; 2d premium, Mrs. Austin W. Ward, $1.50: 3d premium, Charles E. Parker, $1.

No. 170. Potato, Early Rose, half-peck, 1st premium, Joseph Brierly, $2; 2d premium, Simon E. Fisher, $1.50.

No. 171. Pea, half-peck. 1st premium, McLean's Advancer, Joseph Brierly, $2; 2d premium, Champion, Simon E. Fisher, $1.50; 3d premium, Yorkshire Hero, Charles E. Parker, $1.

Gratuity.

Pea, Edible Pod, Charles E. Parker, $1.

No. 151. Beans, Snap, half-peck (called July 2, but no entries). 1st premium, Mrs. M. E. Woodward, $1.50; 2d premium, H. A. Hoyt, $1.

Gratuities.

Lilium, vase, Mrs. T. L. Nelson, $2.
Lilium, vase, H. B. Watts, $1.
Pinks, stand, Mrs. E. Babbitt, 50c.
Sweet Peas, stand, Mrs. Austin W. Ward, 50c.
Cut Flowers, stand, Mrs. L. Morey, 50c.
Cut Flowers, stand, Mrs. S. H. Record, 50c.
Delphinium, stand, Mrs. H. B. Watts, $1.
Cut Flowers, stand, Mrs. S. E. Fisher, 50c.
Cut Flowers, stand, Miss Louie Nelson, 50c.
Cut Flowers, stand, Mrs. Merrifield, 50c.
Sweet Pea, Mrs. S. E. Fisher, 50c.
Wild Lilies, 2 vases, Miss Emma F. Kinney, 50c.
Pansies, display, Miss Fannie C. Morse, $1.
Pansies, display, Mrs. Thomas Ward, $1.

Wednesday, July 16.

No. 172. German Stocks, stand. 1st premium, Charles E. Parker, $2; 2d premium, Mrs. T. L. Nelson, $1.

No. 173. Gloxinia, in bloom, 6 varieties in pots. 2d premium, Mrs. A. S. Buxton, $2.

No. 174. Lilium, vase. 1st premium, H. B. Watts, $2; 2d premium, Mrs. T. L. Nelson, $1.

No. 175. Cut Flowers, distinct varieties, named, stand. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Charles E. Brooks, $2.

No. 176. Hollyhock, double, one flower in each vial, stand. 1st premium, Mrs. A. D. Foster, $3; 2d premium, Mrs. T. L. Nelson, 2; 3d premium, Mrs. Thomas Ward, 1.

No. 177. Currant, 1 quart, Versaillaise. 1st premium, D. C. Tourtellot, $3; 2d premium, Newell Wood, $2; 3d premium, S. A. Arnold, $1.50; 4th premium, Simon E. Fisher, $1; 5th premium, Mrs. Austin W. Ward, 50c.

No. 178. Currant, 1 quart, Red Dutch. 1st premium, D. C. Tourtellot, $3; 2d premium, Newell Wood, $2; 3d premium, F. J. Kinney, $1.50; 4th premium, James F. Allen, $1; 5th premium, S. H. Record, 50c.

No. 179. Currant, 1 quart, White Dutch. 1st premium, Newell Wood, $1.50; 2d premium, Thomas A. Dawson, $1; 3d premium, James F. Allen, 50c.

No. 180. Currant, 1 quart, White Grape. 1st premium, F. J. Kinney, $1; 2d premium, Mrs. Austin W. Ward, 50c.

No. 181. Currant, Cherry, Sparhawk's Honey, gratuity. O. S. Morey, 50c.

No. 183. Raspberry, Clarke, 1 quart. 1st premium, Mrs. Henry Lovell, $1.50; 2d premium, Mrs. C. S. Hall, $1.

No. 184. Raspberry, Franconia, 1 quart. 1st premium, Mrs. M. E. Woodward, $1.50.

No. 185. Raspberry, Hornét, 1 quart. 1st premium, Miss Adeline S. Lincoln, $1.50.

No. 187. Raspberry, Northumberland, 1 quart. 1st premium, F. J. Kinney, $1.50.

No. 188. Raspberry, Turner, 1 quart. 1st premium, Mrs. Josiah Goddard, $1.50; 2d premium, F. J. Kinney, $1.

No. 189. Raspberry, Cuthbert, 1 quart. 1st premium, F. J. Kinney, $1.50; 2d premium, Mrs. Josiah Goddard, $1.

No. 191. Blackcap, Gregg, 1 quart. 1st premium, Mrs. Josiah Goddard, $1.50; 2d premium, F. J. Kinney, $1.

No. 192. Blackcap, gratuity. Souhegan, Centennial, Tyler, F. J. Kinney, $2.

No. 193. Potato, Beauty of Hebron, half-peck. 1st premium, H. B. Watts, $2; 2d premium, F. J. Kinney, $1.50; 3d premium, Simon E. Fisher, $1.

No. 194. Bean, Early Valentine, half-peck. 1st premium, Simon E. Fisher, $2; 2d premium, Mrs. Austin W. Ward, $1.50.

No. 195. Bean, Snap, Wax, half-peck. 1st premium, F. J. Kinney, $2; 2d premium, Mrs. Austin W. Ward, $1.50; 3d premium, J. L. Peters, $1.

Gratuities.

Turnip, White Egg, H. A. Hoyt, $1.

Radish, Joseph Brierly, 50c.

Collection, 5 varieties, J. L. Peters, $2.

Cut Flowers, stand, Mrs. S. E. Fisher, 50c.

Cut Flowers, stand, Miss Louie Nelson, 50c.

China Pinks, stand, Miss Emma F. Kinney, 50c.

Fuchsia, plant, Adin A. Hixon, 50c.

Hollyhock, J. D. Baldwin, 50c.

Wednesday, July 23.

No. 196. Cut Flowers, Seedlings of 1884, stand. 1st premium, W W. Cook, $3; 2d premium, Wm. T. Merrifield, $2; 3d premium, Mrs. F. H. Merrifield, $1.

No. 197. Basket, round, flat, not to exceed 18 inches in diameter. Amateur. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, Mrs. T. L. Nelson, $2; 3d premium, Mrs. S. H. Record, 1.

No. 198. Basket, Florist. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Charles E. Parker, $1.

No. 199. Petunia, 1 spray in a bottle, stand. 1st premium, Wm. T. Merrifield, $3; 2d premium, H. B. Watts, $2; 3d premium, State Lunatic Hospital, $1.

No. 200. Sweet Pea, stand. 1st premium, H. B. Watts, $3; 2d premium, State Lunatic Hospital, $2; 3d premium, Mrs. S. E. Fisher, $1.

Gratuities.

Gloxinia, 3 plants, Mrs. J. A. Wilson, 50c.

Coreopsis, stand, Mrs. Wm. Darling, 50c.

Cut Flowers, stand, Mrs. E. H. DeLand, 50c.

Cut Flowers, Mrs. L. Morey, 50c.

Pansies, basket, Miss E. Ward, 50c.

No. 201. Raspberry, any variety, 1 quart, gratuity. Collection, 6 varieties, F. J. Kinney, $3.

Cuthbert and Gregg, Mrs. Josiah Goddard, $1.50.

Gregg, Mrs. Austin W. Ward, 50c.

Clarke, Mrs. Henry Lovell, 50c.

No. 202. Blackberry, Kittatinny, 1 quart. 1st premium, Mrs. M. E. Woodward, $1.50; 2d premium, R. A. Abbott, $1.

No. 203. Blackberry, Snyder, 1 quart. 1st premium, F. J. Kinney, $1.50; 2d premium, John Midgley, $1.

No. 204. Blackberry, Wachusett, 1 quart. 1st premium, F. J. Kinney, $1.50; 2d premium, Mrs. Josiah Goddard, $1.

No. 206. Squash, Summer, Crookneck, 4 specimens. 1st premium, Simon E. Fisher, $1; 2d premium, Mrs. M. E. Woodward, 50c.

No. 207. Squash, Scallop, 4 specimens. 2d premium, Joseph Brierly, 50c.

No. 209. Corn, Sweet, 12 ears. 1st premium, H. T. Gates, $2; 3d premium, F. J. Kinney, $1.

Gratuities.

Gooseberry, 1 plate, Charles Downing, Mrs. C. S. Hall, 50c.
Vegetables, collection, Mrs. Austin W. Ward, $1.
Currant, White Grape, 1 quart, George M. Pierce, 50c.
Cherry, English Morello, 1 quart, S. H. Record, 50c.
Potato, Clark's No. 1, H. B. Watts, 50c.

Wednesday, July 30.

No. 210. Cut Flowers, grown from Seed by Exhibitor, stand. 1st premium, W. W. Cook, $3; 2d premium, Adin A. Hixon, $2; 3d premium, Mrs. T. L. Nelson, $1.

No. 211. Bouquet, Parlor. Amateur. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, Mrs. S. H. Record, $2; 3d premium, Miss Grace A. Parker, $1.

No. 212. Bouquet, Parlor. Florist. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. Charles E. Parker, $1.

No. 213. Phlox Drummondi, stand. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, Wm. T. Merrifield, $2; 3d premium, Adin A. Hixon, $1.

No. 214. Verbena, 1 truss in a bottle, stand. 1st premium, Adin A. Hixon, $3; 2d premium, H. B. Watts, $2; 3d premium, Mrs. T. L. Nelson, $1.

Gratuities.

Cut Flowers, stand, Mrs. E. H. DeLand, $2.
Cut Flowers, stand, Mrs. S. E. Fisher, $1.
Cut Flowers, stand, Mrs. Thomas Ward, $1.

No. 215. Pear. Doyenné d'Eté, 12 specimens. 1st premium, Newell Wood, $2; 2d premium, D. L. Fisk, $1.50; 3d premium, Joseph C. Lovell, $1; 4th premium, Mrs. C. S. Hall, 50c.

No. 216. Bean, Dwarf, Horticultural, shell, half-peck. 1st premium, Adin A. Hixon, $1.50; 2d premium, J. L. Peters, $1; 3d premium, Mrs. Austin W. Ward, 50c.

No. 217. Bean, any other variety, named, half-peck. 1st premium, Marblehead, S. E. Fisher, $1.50; 2d premium, Arlington, J. L. Peters, 1.

No. 218. Cabbage, Jersey Wakefield, 3 specimens. 1st premium, F. J. Kinney, $1.50; 2d premium, Mrs. Austin W. Ward, $1.

No. 219. Corn, Sweet, 12 ears. 1st premium, Minnesota, F. J. Kinney, $1.50; 2d premium, Marblehead, H. T. Gates, $1; 3d premium, David L. Fisk, 50c.

Gratuities.

Peas, collection, H. B. Watts, $1.

Potato, Chicago Market, S. E. Fisher, 50c.

Gooseberry, Downing, F. E. Kelley, $1.

Wednesday, August 6.

No. 221. Cut Flówers, distinct varieties, 20 blooms or clusters. 1st premium, Adin A. Hixon, $3; 2d premium, W. W. Cook, $2; 3d premium, Mrs. T. L. Nelson, $1.

No. 222. Gladioli, 18 spikes, one in a bottle. 1st premium, William T. Merrifield, $3; 2d premium, Mrs. T. L. Nelson, $2.

Gratuities.

Cut Flowers, display, H. B. Watts, $1.

Cut Flowers, display, Mrs. S. E. Fisher, $1.

Cut Flowers, stand, Mrs. E. H. DeLand, 50c.

Cut Flowers, stand, Mrs. S. H. Record, 50c.

Cut Flowers, stand, Mrs. L. Morey, 50c.

Cut Flowers, stand, Mrs. W. S. Sargent, 50c.

No. 223. Apple. Any variety, twelve specimens, gratuity. Astrachan, Mrs. Austin W. Ward, $1.50.

Sweet Bough, George M. Pierce, $1.

River, Wm. Eames, 50c.

No. 224. Pear, Beurré Giffard, 12 specimens. 1st premium, Mrs. Sarah Spaulding, $1.50; 2d premium, Newell Wood, $1; 3d premium, Thomas A. Dawson, 50c.

No. 225. Pear, Doyenné d'Eté, 12 specimens. 2d premium, Newell Wood, $1.

Gratuity.

Peach, Early Rivers, William Howe, $1.

No. 226. Cabbage, 3 specimens. 1st premium, Charles Greenwood, $1.50; 2d premium, F. J. Kinney, $1.

No. 227. Corn, Crosby, 12 ears. 1st premium, F. J. Kinney, $1.50.

No. 228. Potato, Ohio, half-peck. 1st premium, S. E. Fisher, $1.50; 2d premium, L. R. Eames, $1.

No. 229. Squash, Marrow, 4 specimens. 1st premium, F. J. Kinney, $1.50.

No. 230. Tomato, Acme, 12 specimens. 1st premium, Charles Greenwood, $1.50.

Gratuities.

Cauliflower, Snowball, F. J. Kinney, $1.

Cucumbers, J. L. Peters, $1.

Wednesday, August 13.

No. 231. Antirrhinum (Snapdragon), stand. 1st premium, H. B. Watts, $3; 2d premium, Mrs. Charles E. Brooks, $2.

No. 232. German Stocks, stand. 1st premium, Mrs. F. H. Merrifield, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, Mrs. Adin A. Hixon, 1.

No. 233. Begonia, tuberous-rooted, in bloom, 6 plants in pots. 1st premium, W. W. Cook, $3; 2d premium, Mrs. T. L. Nelson, $2.

No. 234. Pinks, all kinds, stand. 1st premium, W. W. Cook, $3; 2d premium, H. B. Watts, $2; 3d premium, Mrs E. Babbitt, $1.

Gratuities.

Cut Flowers, stand, Miss Louie Nelson, $1.

Cut Flowers, 2 stands, Mrs. S. E. Fisher, $1.

Cut Flowers, stand, Mrs. S. H. Record, 50c.

Cut Flowers, stand, Mrs. L. Morey, 50c.

Lilium Auratum, in pot, and Gloxinias, 24 blooms, Adin A. Hixon, $1.

No. 235. Apple. Astrachan, 12 specimens. 1st premium, Mrs. Austin W. Ward, $1.50; 2d premium, S. H. Record, $1; 3d premium, Thomas A. Dawson, 50c.

No. 236. Apple. Early Harvest, 12 specimens. 1st premium, Mrs. T. S. Stone, $1.50; 2d premium, Mrs. Sarah F. Bennett, $1; 3d premium, Mrs. M. E. Woodward, 50c.

No. 237. Pear, Beurré Giffard, 12 specimens. 1st premium, Newell Wood, $2; 2d premium, Fred. G. Stiles, $1.50; 3d premium, George C. Rice, $1; 4th premium, Wm. T. Merrifield, 50c.

No. 238. Gooseberry, Downing, 1 quart. 1st premium, F. J. Kinney, $1.

No. 240. Bean, Shell, Concord, half-peck. 2d premium, Joseph Brierly, $1.

No. 242. Tomato, Livingston's Perfection, 12 specimens. 2d premium, S. E. Fisher, $1.

Gratuities.

Grapes, Black Hamburg, grown under glass, S. H. Record, $1.50.

Huckleberries, 1 quart, Wm. Eames, 50c.

Peach, Beatrice, George W. Pierce, 50c.

Potato, Clark's No. 1, S. E. Fisher, 50c.

Wednesday, August 20.

No. 243. Aster, Rose, 18 bottles, 1 spray in each. 1st premium, Henry L. Parker, $2; 2d premium, Charles E. Parker, $1; 3d premium, Mrs. E. H. DeLand, 50c.

No. 244. Aster, Hedgehog, 18 bottles, 1 spray in each. 1st premium, Charles E. Parker, $2.

No. 245. Aster, Cocardeau, Crown, 18 bottles, 1 spray in each. 1st premium, Charles E. Parker, $2.

No. 246. Aster, Victoria, 18 bottles, 1 spray in each. 1st premium, Wm. T. Merrifield, $2; 2d premium, Charles E. Parker, $1.

No. 247. Aster, Boltzes, 18 bottles, 1 whole plant each. 1st premium, Charles E. Parker, $2.

No. 248. Aster, Pompon, stand, one spray in each bottle. 1st premium, Mrs. Charles E. Brooks $3; 2d premium, Charles E. Parker, $2; 3d premium, Wm. Darling, $1.

No. 249. Gladioli, distinct named varieties, 18 bottles, 1 spike in each 1st premium, Mrs. T. L. Nelson, $4; 2d premium, O. B. Hadwen, $3; 3d premium, H. B. Watts, $2.

No. 250. Salpiglossis, stand. 1st premium, H. B. Watts, $3; 2d premium, S. H. Record, $2; 3d premium, A. A. Hixon, $1.

Gratuities.

Floral Display, Mrs. Thomas Ward, $1.
Floral Display, Mrs. S. E. Fisher, $1.
Floral Stand, Mrs. Austin Ward, 50c.
Aster, stand, Miss Gracie Parker, 50c.
Floral Stand, Mrs. W. E. Sargent, 50c.
Floral Display, H. B. Watts, $2.
Floral Display, Mrs. Adin A. Hixon, $1.

No. 251. Apple. Astrachan, 12 specimens. 1st premium, Thomas A. Dawson, $1.50; 2d premium, S. H. Smith, $1; 3d premium, George C. Rice, 50c.

No. 253. Pear, Clapp's Favorite. 1st premium, F. A. Stratton, $2; 2d premium, Thomas A. Dawson, $1.50; 3d premium, F. J. Kinney, $1; 4th premium, Miss Carrie A. Burbank, 50c.

No. 254. Pear, Dearborn. 1st premium, R. A. Abbott, $1; 2d premium, Newell Wood, 50c.

Gratuities.

Apple, Williams, H. T. Gates, $1.50.
Apple, Williams, Geo. S. Coe, $1.
Apple, Tetofsky, George C. Rice, $1.

No. 257. Peach, Cole's Early Red. 1st premium, J. E. Pierce, $1.

Gratuity.

Peach, Early Rivers, J. E. Pierce, $1.

No. 259. Squash, Turban, 3 specimens. 1st premium. S. E. Fisher, $2. Awarded Aug. 27.

No. 260. Tomato, Paragon, 12 specimens. 1st premium, S. E. Fisher, $1.50; 2d premium, Joseph Brierly, $1. Awarded Aug 27.

No. 261. Corn, Sweet, 12 ears of not less than 12 rows. 1st premium, S. E. Fisher, $1.50; 2d premium, F. J. Kinney, $1; 3d premium, Sarah F. Bennett, 50c.

Gratuities.

Beans, Concord, S. E. Fisher, $1.
Beans, Concord, Charles E. Parker, 50c.
Celery, display, H. T. Reynolds, $2.
Cauliflower, F. J. Kinney, 50c.

Wednesday, August 27.

No. 262. Cut Flowers, distinct varieties, stand. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, Mrs. T. L. Nelson, $2; 3d premium, A. A. Hixon, $1.

No. 264. Geraniums, distinct varieties named, stand. 1st premium, Mrs. A. A. Hixon, $3; 2d premium, Mrs. Charles E. Brooks, $2.

No. 265. Gladioli, stand, no duplicates. 1st premium, H. B. Watts, $3; 2d premium, Mrs. O. B. Hadwen, $2; 3d premium, Mrs. T. L. Nelson, $1.

No. 266. Phlox, Perennial, stand. 1st premium, Mrs. Thomas Ward, $3; 2d premium, W. W. Cook, $2; 3d premium, H. B. Watts, $1.

No. 267. Apple. Sweet Bough, 12 specimens. 1st premium, O. B. Wyman, $1.50; 2d premium, S. H. Record, $1; 3d premium, William Eames, 50c.

No. 268. Apple. Duchess of Oldenburg. 1st premium, Geo. C. Rice, $2; 2d premium, Mrs. Sarah Whitney, $1.50; 3d premium, O. B. Hadwen, $1; 4th premium, William Eames, 50c.

No. 281. Apple. Williams' Red. 1st premium, George C. Rice, $1; 2d premium, H. T. Gates, 50c.

No. 269. Pear, Clapp's Favorite, 12 specimens. 1st premium, O. B. Hadwen, $3; 2d premium, F. A. Stratton, $2; 3d premium, A. C. Rice, $1.50; 4th premium, H. L. Parker, $1; 5th premium, Thomas A. Dawson, 50c.

No. 270. Pear, Rostiezer. 1st premium, Thomas A. Dawson, $1.50; 2d premium, R. A. Abbott, $1; 3d premium, O. B. Wyman, 50c.

No. 271. Pear, Tyson. 1st premium, John C. Newton, $1.50; 2d premium, George C. Rice, $1; 3d premium, Mrs. M. E. Woodward. 50c.

No. 272. Pear, Beurré de l'Assomption. 1st premium, F. M. Marble, $1.50.

Gratuity.

Pear. Petite Marguerite, Joseph C. Lovell, $1.

No. 311. Plum, Bradshaw. 1st premium, Thomas A. Dawson, $1; 2d premium, Mrs. M. E. Woodward, 50c.

No. 275. Bean, Horticultural, pole, half-peck. 1st premium, S. E. Fisher, $1.50; 2d premium, Joseph Brierly, $1; 3d premium, Mrs. A. E. Henderson, 50c.

Gratuities.

Cut Flowers, stand, Mrs. S. E. Fisher, $1.
Cut Flowers, stand, Mrs. S. H. Record, $1.
Cut Flowers, Mrs. E. H. DeLand, $1.
Dahlia, stand, F. A. Blake, $1.
Wild Flowers, vases, Asa S. Kinney, 50c.

Wednesday, September 3.

No. 276. Balsams, stand, 1 spike in a bottle. 1st premium, Mrs. S. E. Fisher, $3; 2d premium, H. B. Watts, $2; 3d premium, William Darling, $1.

No. 277. Scabiosa, stand. 1st premium, Mrs. Charles E. Parker, $3; 2d premium, William Darling, $2; 3d premium, Mrs. A. A. Hixon, $1.

No. 278. Zinnia, stand, not less than 12 varieties. 1st premium, Mrs. A. A. Hixon, $2; 2d premium, H. B. Watts, $1.

No. 279. Marigold, stand. 1st premium, Mrs. A. A. Hixon, $2; 2d premium, William Darling, $1.

Gratuities.

H. B. Watts, 50c.
Mrs. T. L. Nelson, $1.
Mrs. Thomas Ward, $1.
Mrs. S. E. Fisher, 50c.
Mrs. S. H. Record, 50c.
Mrs. L. Morey, 50c.

No. 280. Apple. Sweet Bough, 12 specimens. 1st premium, Mrs. F. E. Goodale, $1; 2d premium, O. B. Wyman, 50c.

No. 283. Pear, Clapp's Favorite, 12 specimens. 1st premium, F. A. Stratton, $3; 2d premium, Alden Rice, $2; 3d premium, James Brastow, $1.50; 4th premium, A. L. Rice, $1.

No. 284. Pear, Tyson. 1st premium, George C. Rice, $1.50; 2d premium, Mrs. M. E. Woodward, $1.

Gratuities.

Apple, Alexander, Newell Wood, $1.

Apple, Somerset, A. A. Hixon, $1.

Pear, Beurré de l'Assomption, Edw. W. Lincoln, $1.

Pear, Ott, Fred. G. Stiles, 50c.

No. 285. Peach, Cooledge, 12 specimens. 1st premium, O. B. Wyman, $1.

No. 289. Plum, Imperial Gage, 12 specimens. 1st premium, S. H. Record, $1.50; 2d premium, Thomas A. Dawson, $1.

No. 291. Plum, Quackenboss. 1st premium, S. H. Record, $1.

No. 311. Plum, Bradshaw. 1st premium, S. H. Record, $1; 2d premium, Thomas A. Dawson, 50c.

No. 312. Plum, General Hand. 1st premium, S. H. Record, $1; 2d premium, F. A. Stratton, 50c.

No. 314. Plum, Lombard. 1st premium, Mrs. F. E. Goodale, $1; 2d premium, Thomas A. Dawson, 50c.

No. 316. Plum, Victoria. 1st premium, F. A. Stratton, $1; 2d premium, Thomas A. Dawson, 50c.

Gratuities.

Peach, Seedling, 12 specimens, Mrs. Henry Lovell, $1.50.

Grape, Massasoit, 3 clusters, F. J. Kinney, $1.

Potato, Queen of the Valley, H. S. Ball, $1.

Cabbage, Savoy, Alden Rice, $1.

No. 293. Vegetable, Collection of 4 varieties, Bean, Potato, half-peck, Squash, 3 specimens, Corn, Sweet, 12 ears. 1st premium, S. E. Fisher, $3; 2d premium, F. J. Kinney, $2; 3d premium, J. L. Peters, $1.

Wednesday, September 10.

No. 294. Bouquet, Parlor, loosely arranged, Amateur. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, Mrs. T. L. Nelson, $2; 3d premium, Mrs. F. H. Merrifield, $1.

No. 295. Florist. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. Charles E. Parker, $1.

No. 296. Dahlias, Large Flowered, stand. 1st premium, Mrs. Adin A. Hixon, $3; 2d premium, Mrs. F. A. Blake, $2; 3d premium, Mrs. T. L. Nelson, $1.

No. 297. Dahlias, Pompon, stand. 1st premium, Mrs. Adin A. Hixon, $3.

No. 298. Dahlias, single, 6 blooms. 1st premium, Mrs. Charles E. Brooks, $1; 2d premium, Mrs. Adin A. Hixon, 50c.

No. 299. Lilium Japonicum, display. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, H. B. Watts, $1.

No. 300. Nasturtium and Tropæolum, stand, not more than twelve in a bottle. 1st premium, Mrs. Adin A. Hixon, $3; 2d premium, H. B. Watts, $2; 3d premium, Mrs. T. L. Nelson, $1.

No. 302. Apple. Worcester Spy, 12 specimens. 1st premium, Geo. C. Rice, 1; 2d premium, William Eames, 50c.

No. 303. Crab Apple, Transcendant, 24 specimens. 1st premium, George C. Rice, $1.50; 2d premium, S. H. Record, $1; 3d premium, Wm. Eames, 50c.

No. 304. Pear, Ansault, 12 specimens. 1st premium, J. C. Lovell, $1.50.

No. 305. Pear, Bartlett, 12 specimens. 1st premium, S. H. Record, weight 8 lbs. 3¼ oz., $1.50; 2d premium, J. W. Powers, $1; 3d premium, Amos L. Doane, 50c.

No. 306. Pear, Belle Lucrative. 1st premium, Thomas A. Dawson, $1.50; 2d premium, A. A. Copeland $1; 3d premium, Henry L. Parker, 50c.

No. 307. Pear, Earle's Bergamot. 1st premium, Charles E. Brooks, $1.50; 2d premium, Henry L. Parker, $1; 3d premium, Joseph C. Lovell, 50c.

No. 308. Pear, St. Ghislain. 1st premium, Silas J. Brimhall, $2; 2d premium, Newell Wood, $1.50; 3d premium, Mrs. Henry Phelps, $1; 4th premium, Wm. H. Earle, 50c.

No. 315. Plum, Monroe. 1st premium, S. H. Record, $1.

Gratuities.

Peaches, Seedlings, 2 plates, F. E. Kelley, $1.

Grapes, Collection of 8 plates, Joseph C. Lovell, $1.

Pear, Flemish Beauty, 1 plate, J. H. Barton, $1.

No. 317. Cucumber, half-peck, for pickles. 1st premium, Charles Greenwood, $1.50; 2d premium, S. E. Fisher, $1; 3d premium, J. L. Peters, 50c.

No. 318. Peppers, 12 specimens. 1st premium, C. A. Lovell, $1.50; 2d premium, S. H. Record, $1; 3d premium, J. L. Peters, 50c.

No. 319. Bean, Lima, half-peck. 1st premium, S. E. Fisher, $1.50; 2d premium, D. D. Winn, $1; 3d premium, F. J. Kinney, 50c.

Wednesday, September 17.

No. 320. Cut Flowers, distinct varieties, 20 blooms or clusters. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, W. W. Cook, $1.

No. 321. Geranium, open culture, stand. 1st premium, Mrs. Adin A. Hixon, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, W. W. Cook, $1.

No. 322. Pansy, with foliage, stand, 3 spikes in each bottle. 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. S. H. Record, $1.

No. 323. Flowers and Fruit, Combination. 1st premium, Mrs. Charles E. Parker, $3; 2d premium, Mrs. S. H. Record, $2; 3d premium, Mrs. T. L. Nelson, $1.

Gratuities.

Cut Flowers, stand, Mrs. S. E. Fisher, 50c.

Cut Flowers, stand, Mrs. S. H. Record, 50c.

Dahlia, stand, Mrs. Thomas Ward, 50c.

Flowers and Fruit, Vase, Mrs. L. Morey, 50c.

No. 324. Apple. Foundling. 1st premium, Mrs. S. F. Bennett, $1; 2d premium, Mrs. Josiah Goddard, 50c.

No. 325. Apple. Golden Sweet. 1st premium, George C. Rice, $1; 2d premium, Sumner Cook, 50c.

No. 326. Apple. Gravenstein. 1st premium, Charles E. Parker, $2; 2d premium, George C. Rice, $1.50; 3d premium, O. B. Wyman, $1; 4th premium, L. R. Eames, 50c.

No. 327. Pear, Bartlett. 1st premium, J. W. Powers, $3; 2d premium, S. H. Record, $2; 3d premium, S. J. Brimhall, $1.50; 4th premium, Charles H. Wakefield, $1; 5th premium, Eben Jewett, 50c.

Gratuities.

Grape, Worden, H. A. Cook, $1.

Pear, Eugene Appert, Joseph C. Lovell, $1.

No. 329. Plum, Coe's Golden Drop, 12 specimens. 1st premium, S. H. Record, $1.

No. 330. Plum, Reine Claude de Bavay. 1st premium, S. H. Record, $1; 2d premium, Mrs. M. E. Woodward, 50c.

No. 333. Melon, Yellow Flesh, 3 specimens. 1st premium, F. J. Kinney, $1.

No. 334. Melon, Green Flesh, 3 specimens. 1st premium, Charles Greenwood, $1; 2d premium, Eben Jewett, 50c.

No. 335. Watermelon, 2 specimens. 1st premium, Eben Jewett, $1; 2d premium, F. J. Kinney, 50c.

Wednesday, September 24.

No. 336. Aster, stand. 1st premium, H. B. Watts, $3; 2d premium, A. A. Hixon, $2.

No. 337. Basket, Flowers, not to exceed 15 inches in diameter, with handle, on stand, Amateur. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, Mrs. S. H. Record, $1.

No. 338. Florist. 1st premium, Mrs. Thomas Ward, $3; 2d premium, Mrs. Charles E. Parker, $2.

No. 339. Verbena, stand. 1st premium, H. B. Watts, $3; 2d premium, Mrs. Adin A. Hixon, $2; 3d premium, Mrs. S. H. Record, $1.

No. 340. Cut Flowers, stand. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Adin A. Hixon, $2; 3d premium, W. W. Cook, $1.

Gratuities.

Gladioli, display, H. B. Watts, $2.

Dahlia, display, A. A. Hixon, $2.

Cut Flowers, stand, Mrs. S. E. Fisher, 50c.

Cut Flowers, stand, W. S. Whitmore, 50c.

No. 341. Apple. Porter, 12 specimens. 1st premium, Thomas A. Dawson, $2; 2d premium, Thomas Talbot, $1.50; 3d premium, Adin A. Hixon, $1; 4th premium, L. R. Eames, 50c.

No. 343. Crab Apple. Hyslop, 24 specimens. 1st premium, George J. McCracken, $1; 2d premium, James Palmer, 50c.

No. 344. Pear, Doyenné Boussoc, 12 specimens. 1st premium, George F. Hoar, $1; 2d premium, Newell Wood, 50c.

No. 345. Pear, Durandeau. 1st premium, James F. Allen, $1.50; 2d premium, F. M. Marble, $1.

No. 347. Pear, Paradis d'Automne. 1st premium, J. Henry Hill, $2; 2d premium, James F. Allen, $1.50; 3d premium, F. M. Marble, $1; 4th premium, Wm. H. Earle, 50c.

No. 348. Pear, Seckel. 1st premium, D. C. Tourtellot, $1.50; 2d premium, J. Henry Hill, $1; 3d premium, Thomas Talbot, 50c.

No. 356. Grape, Moore, 3 clusters. 1st premium, Herbert A. Cook, $1.50.

No. 357. Grape, Lady. 1st premium, Herbert A. Cook, $1; 2d premium, Joseph C. Lovell, 50c.

No. 358. Grape, Lindley. 1st premium, Joseph C. Lovell, $1.50; 2d premium, F. J. Kinney, $1.

No. 360. Grape, Iona. 1st premium, George M. Pierce, $1.50.

No. 361. Grape, Massasoit. 1st premium, F. J. Kinney, $1.50.

No. 362. Grape, Salem. 1st premium, F. J. Kinney, $1.50.

No. 363. Grape, Wilder. 1st premium, Joseph C. Lovell, $1.50.

No. 364. Grape, Worden. 1st premium, Herbert A. Cook, $1.50; 2d premium, Joseph C. Lovell, $1; 3d premium, F. J. Kinney, 50c.

No. 365. Grape, Brighton. 1st premium, Joseph C. Lovell, $1.50; 2d premium, Mrs. Austin W. Ward, $1; 3d premium, F. J. Kinney, 50c.

Gratuity.

Grape, Rachel, J. C. Lovell, $1.

Grape, Victor, Herbert A. Cook, $1.

Grape, Seedling, Mrs. F. E. Goodale, $1.

Apple, Seedling, Thomas A. Dawson, $1.

No. 366. Carrot, any variety, 12 specimens. 1st premium, S. E. Fisher, $1.50; 2d premium, John Osborne, $1.

No. 367. Egg Plant, 4 specimens. 1st premium, F. J. Kinney, $2.

No. 368. Martynia, 24 specimens. 1st premium, S. E. Fisher, $1.50; 2d premium, H. B. Watts, $1.

Wednesday, October 1.

No. 369. Basket of Flowers, not to exceed 15 inches in diameter, flat, oval, Amateur. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, Mrs. F. H. Merrifield, $1.

No. 370. Florist. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, Mrs. Charles E. Parker, $1.

No. 371. Cut Flowers, stand. 1st premium, Mrs. T. L. Nelson, $3; 2d premium, Mrs. A. A. Hixon, $2; 3d premium, Mrs. Charles E. Brooks, $1.

No. 372. Gladiolus, display. 1st premium, H. B. Watts, $3.

Gratuities.

Dahlia, display, Mrs. F. A. Blake, $1.

Nasturtium, Dahlia, Marigolds, stand of each, Mrs. A. A. Hixon, $2.

Dahlia, stand, Mrs. Thomas Ward, $1.

Cut Flowers and Phlox, stand, Mrs. S. E. Fisher, $1.

Cut Flowers and Phlox, stand, Mrs. S. H. Record, 50c.

Pansy, stand, Wm. Darling, 50c.

No. 373. Apple. Gravenstein. 1st premium, O. B. Wyman, $3; 2d premium, J. Henry Hill, $2; 3d premium, Sumner Cook, $1.50; 4th premium, George C. Rice, $1; 5th premium, L. R. Eames, 50c.

No. 374. Apple. Holden Pippin. 1st premium, O. B. Wyman $1.50; 2d premium, Wm. G. Maynard, $1; 3d premium, Mrs. Josiah Goddard, 50c.

No. 375. Apple. Lyscom. 1st premium, George C. Rice, $1.50; 2d premium, Simon E. Fisher, $1; 3d premium, Mrs. Louisa Chapin, 50c.

No. 376. Apple. Twenty Ounce. 1st premium, Walter Overend, $1.50; 2d premium, L. R. Eames, $1; 3d premium, Mrs. J. B. Brastow, 50c.

No. 377. Pear, Beurré Hardy. 1st premium, J. Henry Hill, $1.50; 2d premium, George F. Hoar, $1; 3d premium, Mrs. T. L. Nelson, 50c.

No. 378. Pear, Superfin. 1st premium, Moses Church, $2; 2d premium, D. C. Tourtellot, $1.50; 3d premium, James F. Allen, $1; 4th premium, F. H. Dewey, 50c.

No. 379. Pear, Louise Bonne de Jersey. 1st premium, J. L. Estey, $3; 2d premium, A. A. Copeland, $2; 3d premium, Joseph Brierly, $1.50; 4th premium, Mrs. Henry Lovell, $1; 5th premium, Thomas A. Dawson, 50c.

No. 380. Pear, Seckel. 1st premium, Freeman Brown, $3; 2d premium, J. P. Currier, $2; 3d premium, J. Henry Hill, $1.50; 4th premium, Mrs. William Richardson, $1; 5th premium, Loring Coes, 50c.

No. 382. Pear, Washington. 1st premium, Mrs. Henry Phelps, $1; 2d premium, Edward W. Lincoln, 50c.

No. 383. Pear, Buffum. 1st premium, Samuel Smith, $1; 2d premium, E. I. Comins, 50c.

Gratuity.

Pear, St. Michel, George F. Hoar, 50c.

No. 384. Peach, any variety, 12 specimens, gratuity. Oldmixon, Thomas Smith, $1.

Seedling, Mrs. C. Bancroft, 50c.

No. 385. Grape, Concord, 3 clusters. 1st premium, A. J. Cook, $2; 2d premium, F. J. Kinney, $1; 3d premium, A. A. Copeland, 50c.

No. 386. Grape, Delaware. 1st premium, A. A. Copeland, $2; 2d premium, Horatio Phelps, $1.50; 3d premium, Wm. G. Maynard, $1; 4th premium, Walter Overend, 50c.

No. 388. Grape, Pocklington. 1st premium, Mrs. Austin W. Ward, $1; 2d premium, Mrs. Wharton, 50c.

No. 389. Grape, any other variety, gratuity. Diana, Charles E. Parker, $1.

Croton, A. J. Cook, $1.

Rochester, Mrs. Henry Phelps, $1.

Seedling, Horatio Phelps, 50c.

Martha, Curtis Jenkins, 50c.

No. 390. Vegetable, 4 varieties, Onion, Potato, half-peck each, Cabbage, 3 specimens, Squash, 6 specimens. 1st premium, F. J. Kinney, $2; 2d premium, S. E. Fisher, $1.50; 3d premium, H. B. Watts, $1.

No. 391. Cauliflower, 3 specimens. 1st premium, Cyrus A. Lovell, $1.50; 2d premium, F. J. Kinney, $1.

Gratuities.

Corn and Tomato, H. B. Watts, 50c.

Potato and Onion, William Cruickshank, $1.

Wednesday, October 8.

No. 392. Cut Flowers, distinct varieties, stand. 1st premium, Mrs. A. A. Hixon, $3; 2d premium, Mrs. Charles E. Brooks, $2; 3d premium, Mrs. T. L. Nelson, $1.

No. 393. Flowers and Fruit, Combination. 1st premium, W. W. Cook, $3; 2d premium, Charles E. Parker, $2; 3d premium, Mrs. T. L. Nelson, $1.

Gratuities.

Cut Flowers, display, A. A. Hixon, $2.

Cut Flowers, display, H. B. Watts, $2.

Cut Flowers, stand, Mrs. S. H. Record, 50c.

Cut Flowers, stand, Mrs. David Fitts, 50c.

Cut Flowers, stand, Mrs. E. H. DeLand, 50c.

Cut Flowers, stand, Mrs. S. E. Fisher, 50c.

Cut Flowers, stand, Mrs. Thomas Ward, 50c.

Cut Flowers, stand, Mrs. W. E. Sargent, 50c.

No. 394. Apple. Garden Royal, 12 specimens. 1st premium, O. B. Wyman, $1.

No. 395. Apple. Maiden's Blush. 1st premium, J. Henry Hill, $1.50.

No. 396. Apple. Washington Strawberry. 1st premium, George C. Rice, $1; 2d premium, Charles T. Foster, 50c.

No. 397. Apple. Any other variety, gratuity. Wealthy, Joseph C. Lovell, $1.

Pewaukee, George C. Rice, $1.

American Beauty, O. B. Wyman, 50c.

Golden Eagle, J. L. Peters, 50c.

No. 398. Pear, Beurré Bosc, 12 specimens. 1st premium, Sumner Dinsmore, $3; 2d premium, Edward Spaulding, $2; 3d premium, Thomas A. Dawson, $1.50; 4th premium, J. F. Allen, $1; 5th premium, Moses Church, 50c.

No. 399. Pear, Dr. Reeder. 1st premium, Moses Church, $1.50; 2d premium, George F. Hoar, $1; 3d premium, Joseph C. Lovell, 50c.

No. 400. Pear, Sheldon. 1st premium, Mrs. T. M. Lamb, $2; 2d premium, Walter Overend, $1.50; 3d premium, S. A. Arnold, $1; 4th premium, T. A. Dawson, 50c.

No. 401. Pear, any other variety, gratuity. Howell, T. A. Dawson, $1.

Marie Louise, A. K. Gould, $1.

No. 402. Grape, open culture, any variety, 3 clusters, gratuity. Collection, Joseph C. Lovell, $3.

No. 404. Quince, Orange. 1st premium, Robert Merrigan, $1.50; 2d premium, Newell Wood, $1; 3d premium, George F. Hoar, 50c.

Gratuity.

Peach, John S. Baldwin, 50c.

No. 405. Potato, 6 varieties, named, 12 specimens of each. 1st premium, F. J. Kinney, $2; 2d premium, Joseph Brierly, $1.50; 3d premium, S. E. Fisher, $1.

No. 406. Squash, Hubbard, 3 specimens. 1st premium, S. E. Fisher, $1.50; 2d premium, F. J. Kinney, $1; 3d premium, H. B. Watts, 50c.

No. 407. Celery, 6 specimens. 1st premium, F. J. Kinney, $2; 2d premium, H. T. Reynolds, $1; 3d premium, Joseph Brierly, 50c.

Wednesday, October 15.

No Exhibition this day on account of Bi-Centennial Celebration.

Wednesday, October 22.

No. 408. Cut Flowers, Bouquet, style, flat, mantle. 1st premium, W. W. Cook, $3; 2d premium, Mrs. Thomas Ward, $2; 3d premium, H. B. Watts, $1.

No. 409. Cut Flowers, stand. 1st premium, Mrs. Charles E. Brooks, $3; 2d premium, Mrs. A. A. Hixon, $2.

No. 410. Apple. Baldwin, 12 specimens. 1st premium, E. A. Bartlett, $4; 2d premium, H. A. Cook, $3; 3d premium,

George C. Rice, $2; 4th premium, S. H. Record, $1.50; 5th premium, Charles Greenwood, $1; 6th premium, S. E. Fisher, 50c.

No. 411. Apple. King of Tompkins County. 1st premium, George C. Rice, $2; 2d premium, Newell Wood, $1.50; 3d premium, Mrs. S. F. Bennett, $1; 4th premium, William Eames, 50c.

No. 412. Apple. Leicester Sweet. 1st premium, O. B. Hadwen, $1.50; 2d premium, Mrs. S. F. Bennett, $1.

No. 414. Pear, Beurré Bosc, 12 specimens. 1st premium, James F. Allen, $2; 2d premium, F. M. Marble, $1.50; 3d premium, Thomas A. Dawson, $1; 4th premium, Edward W. Lincoln, 50c.

No. 415. Pear, Dix, 12 specimens. 1st premium, O. B. Wyman, $1.50; 2d premium, H. G. Upham, $1; 3d premium, John C. Newton, 50c.

No. 416. Pear, Onondaga. 1st premium, George E. Francis, $1.50; 2d premium, J. B. Crosby, $1; 3d premium, Fred. G. Stiles, 50c.

No. 417. Grape, open culture, any variety, 3 clusters. 1st premium, Iona, S. A. Arnold, $1.50; 2d premium, Wyoming Red, F. J. Kinney, $1.

No. 418. Quince, any variety, named, 12 specimens. 1st premium, Orange, Mrs. J. P. Curtis, $3; 2d premium, Mrs. Henry Phelps, $2.

No. 419. Kohl Rabi, 6 specimens. 1st premium, Mrs. Austin W. Ward, $1.50; 2d premium, S. E. Fisher, $1; 3d premium, H. A. Jones, 50c.

No. 420. Onion, Red Globe, half-peck. 1st premium, F. J. Kinney, $1.50; 2d premium, H. B. Watts, $1.

No. 421. Onion, Yellow Danvers, half-peck. 1st premium, Charles Greenwood, $1.50; 2d premium, F. J. Kinney, $1; 3d premium, H. B. Watts, 50c.

No. 422. Salsify, 12 specimens. 1st premium, E. A. Bartlett, $1.50; 2d premium, H. T. Reynolds, $1; 3d premium, F. J. Kinney, 50c.

No. 423. Cut Flowers, in any form, gratuity.

Cut Flowers, stand, Mrs. S. H. Record, $1.

Cut Flowers, stand, Mrs. T. L. Nelson, $1.

Cut Flowers, stand, Mrs. S. E. Fisher, $1.

Cut Flowers, stand, H. B. Watts, $1.

Cut Flowers, stand, Mrs. Samuel Morey, 50c.

No. 424. Apple. McClellan, 12 specimens. 1st premium, O. B. Wyman, $1.50; 2d premium, Joseph C. Lovell, $1; 3d premium, O. B. Hadwen, 50c.

No. 425. Apple. Sutton Beauty. 1st premium, O. B. Hadwen, $1.50.

No. 426. Apple. R. I. Greening. 1st premium, George C. Rice, $3; 2d premium, S. H. Record, $2; 3d premium, Mrs. Austin W. Ward, $1.50; 4th premium, D. C. Tourtellot, $1; 5th premium, Mrs. A. J. Keith, 50c.

No. 427. Apple. Any other variety, named, gratuity. McIntosh Red, Joseph C. Lovell, $1.50.

Peck's Pleasant, George C. Rice, $1.

No. 428. Pear, Anjou. 1st premium, Isaac Bancroft, $3; 2d premium, A. K. Gould, $2; 3d premium, H. L. Parker, $1.50; 4th premium, Mrs. T. M. Lamb, $1; 5th premium, S. H. Record, 50c.

No. 429. Pear, Beurré Diel. 1st premium, Samuel Smith, $1.50; 2d premium, Thomas Talbot, $1; 3d premium, A. K. Gould, 50c.

No. 430. Pear, Doyenné du Comice, 12 specimens. 1st premium, J. Henry Hill, $3; 2d premium, George M. Pierce, $2; 3d premium, George F. Hoar, $1.50; 4th premium, Edward W. Lincoln, $1; 5th premium, P. D. Towne, 50c.

No. 431. Pear, Urbaniste. 1st premium, Thomas A. Dawson, $2; 2d premium, James F. Allen, $1.50; 3d premium, Mrs. James Green, $1; 4th premium, Joseph C. Lovell, 50c.

No. 432. Vegetable, Collection, from seed that was itself raised by the competitors. 1st premium, J. L. Peters, $3; 2d premium, Simon E. Fisher, $2.

No. 433. Salsify, 12 specimens. 1st premium, H. B. Watts, $1.50; 2d premium, J. L. Peters, $1; 3d premium, R. A. Abbott, 50c.

Wednesday, October 29.

No. 434. Fern, Parlor, 1 plant. 1st premium, Mrs. T. L. Nelson, $2; 2d premium, Mrs. Thomas Ward, $1; 3d premium, Mrs. A. C. Wilson, 50c.

No. 435. Palm, Parlor, 1 plant. 1st premium, Mrs. T. L. Nelson, $2; 2d premium, Mrs. Thomas Ward, $1; 3d premium, Mrs. Charles E. Brooks, 50c.

No. 436. Pot Plants, in bloom, gratuity. Mrs. Charles E Brooks, $1.50.

Gratuities.

Cut Flowers, stand, Mrs. Charles E. Brooks, $1.

Cut Flowers, stand, Mrs. H. B. Watts, 50c.

Pansies, stand, Mrs. William Darling, 50c.

Cut Flowers, basket, Mrs. Thomas Ward, $1.50.
Cut Flowers, basket, Mrs. A. A. Hixon, $1.
Cut Flowers, basket, Mrs. S. E. Fisher, 50c.
Wild Flowers, basket, Mrs. L. Morey, 50c.

No. 437. Apple. Hubbardston Nonesuch, 12 specimens. 1st premium, Mrs. Austin W. Ward, $3; 2d premium, George C. Rice, $2; 3d premium, William Eames, $1.50; 4th premium, William G. Maynard, $1; 5th premium, O. B. Wyman, 50c.

No. 438. Apple. Canada Red (Old Nonesuch). 1st premium, George C. Rice, $1.50; 2d premium, J. W. Powers, $1; 3d premium, Wm. Eames, 50c.

No. 439. Apple. Mother. 1st premium, George C. Rice, $1.50; 2d premium, Newell Wood, $1; 3d premium, E. J. Howe, 50c.

No. 440. Apple. Northern Spy, 12 specimens. 1st premium, Thomas A. Dawson, $2; 2d premium, Alden Rice, $1.50; 3d premium, William Eames, $1; 4th premium, George C. Rice, 50c.

No. 441. Apple. Roxbury Russet. 1st premium, George J. McCracken, $2; 2d premium, O. B. Wyman, $1.50; 3d premium, Mrs. A. J. Keith, $1; 4th premium, George C. Rice, 50c.

No. 442. Apple. Yellow Belle Flower. 1st premium, Adin A. Hixon, $1.50; 2d premium, Newell Wood, $1; 3d premium, E. N. Boynton, 50c.

No. 443. Pear, Clairgeau. 1st premium, O. B. Hadwen, $1.50; 2d premium, George F. Hoar, $1; 3d premium, Newell Wood, 50c.

No. 444. Pear, Beurré Langelier. 1st premium, George M. Pierce, $1.50; 2d premium, Fred. G. Stiles, $1; 3d premium, James F. Allen, 50c.

No. 445. Pear, Dana's Hovey. 1st premium, Henry L. Parker, $1.50; 2d premium, Silas J. Brimhall, $1.

No. 446. Pear, Duchesse d'Angoulême. 1st premium, Thomas A. Dawson, $2; 2d premium, Mrs. H. B. Buck, $1.50; 3d premium, Henry L. Parker, $1; 4th premium, J. A. Bancroft, 50c.

No. 447. Pear, Glout Morçeau, 12 specimens. 1st premium, George F. Hoar, $1.50; 2d premium, Thomas A. Dawson, $1.

No. 448. Pear, Josephine de Malines. 1st premium, Joseph L. Brierly, $1.50; 2d premium, George M. Pierce, $1; 3d premium, Mrs. Henry Phelps, 50c.

No. 449. Pear, Lawrence. 1st premium, H. A. Cook, $3; 2d premium, O. B. Wyman, $2; 3d premium, George F. Hoar, $1.50; 4th premium, J. Henry Hill, $1; 5th premium, Fred. G. Stiles, 50c.

No. 450. Pear, Mount Vernon. 1st premium, J. W. Powers, $1; 2d premium, Newell Wood, 50c.

No. 451. Pear, Winter Nelis. 1st premium, Samuel Smith, $2; 2d premium, F. J. Kinney, $1.50; 3d premium, George F. Hoar, $1; 4th premium, Freeman Brown, 50c.

No. 452. Pear, Sieulle. 1st premium, J. Henry Hill, $1.50.

No. 453. Pear, Vicar. 1st premium, S. Dinsmore, $1.50; 2d premium, H. G. Upham, $1; 3d premium, W. T. Newton, 50c.

No. 454. Collection of Vegetables. 1st premium, F. J. Kinney, $3; 2d premium, S. E. Fisher, $2.

No. 455. Seeds, Collection of Vegetables, Potatoes excluded. 1st premium, F. J. Kinney, $4; 2d premium, J. L. Peters, $3; 3d premium, A. A. Hixon, $2; 4th premium, H. A. Cook, $1.

No. 456. Celeriac, 6 specimens. 2d premium, H. B. Watts, $1.

No. 457. Celery, 12 specimens. 1st premium, H. T. Reynolds, $4; 2d premium, F. J. Kinney, $3; 3d premium, Joseph Brierly, $2; 4th premium, H. B. Watts, $1.

SPECIAL CHRYSANTHEMUM EXHIBITION

ON

Wednesday, November 12.

No. 1. Chinese, 6 plants, distinct named. 1st premium, State Lunatic Hospital, $4; 2d premium, Charles D. Thayer, $3.

No. 2. Japanese, 6 plants, distinct named. 1st premium, State Lunatic Hospital, $4; 2d premium, W. W. Cook, $3; 3d premium, Charles D. Thayer, $2.

No. 3. Pompon, 6 plants, distinct named. 1st premium, Charles D. Thayer, $4; 2d premium, State Lunatic Hospital, $3.

No. 4. From Amateurs, 3 plants, distinct in color. 1st premium, H. B. Watts, $2; 2d premium, Mrs. Charles E. Brooks, $1.50.

No. 5. Display, in pots, any variety.. 1st premium, State Lunatic Bospital, $6; 2d premium, Charles D. Thayer, $4.

No. 6. Cut Blooms, stand, one spray in a bottle. 1st premium, State Lunatic Hospital, $3; 2d premium, W. W. Cook, $2; 3d premium, Mrs. F. H. Merrifield, $1.

BY-LAWS

OF THE

Worcester County Horticultural Society.

ANNUAL MEETING.

ARTICLE 1. There shall be an Annual Meeting of the Society to be held on the first Wednesday in November of each year.

MEMBERSHIP.

ARTICLE 2. Any male person may become a Member of the Society on payment of the sum of Five Dollars; females upon the payment of Three Dollars. Honorary Members may be admitted by vote of the Society or of the Trustees, but shall not have the right to vote at any Business Meeting.

OFFICERS.

ARTICLE 3. The Officers of the Society shall consist of a President, three (3) Vice-Presidents, a Secretary, a Librarian, and a Treasurer—(all of whom shall be Trustees *ex-officiis*).

The Officers are to be elected by ballot, to hold their offices until the next annual election, or until others are chosen in their places, and to discharge the duties of their respective offices.

MEETINGS OF THE SOCIETY.

ARTICLE 4. All meetings of the Society shall be called by giving not less than one (1) week's notice in at least one newspaper published in the City of Worcester. Special Meetings of the Society shall be called at any time, on the application of five (5) members therefor. And at all meetings of the Society, seven (7) shall constitute a quorum for the transaction of business.

SECRETARY.

ARTICLE 5. HIS DUTIES: The Secretary shall keep records of all business transacted at the meetings of the Society and of the Trustees, and also of the admission of Members, and he shall call and notify meetings of the Society and of the Trustees, and shall notify persons chosen to office in the Society of their election and the Committees of their appointment, and shall attend to the correspondence of the Society.

TREASURER.

ARTICLE 6. HIS DUTIES: The Treasurer shall, at each Annual Meeting of the Society, make a Report of his receipts and expenditures on account of the Society, and the condition of its finances, and exhibit his accounts. And a Committee shall be annually appointed by the Trustees to examine and audit his accounts and to report thereon. The Treasurer shall give bonds to the acceptance of the Trustees of the Society for the faithful discharge of the duties of his office.

TRUSTEES.

ARTICLE 7. THEIR NUMBER: The Trustees shall consist of any number not less than twenty-five (25) exclusive of the officers, who are Trustees *ex-officiis*—and the exact number of Trustees for the year ensuing, shall be determined at each Annual Meeting.

THEIR POWERS: The Trustees shall have the general charge and direction of the affairs and business of the Society, its funds and property, so far as not otherwise provided for in the By-Laws or at the meetings of the Society; and may appoint one or more exhibitions of Flowers, Fruit or Vegetables in each year, and make all arrangements therefor and for conducting the same, including the appointment of Committees; and may establish premiums and provide for awarding the same, and shall direct the disposal of all articles of a vegetable growth which may be presented to the Society, including the distribution of Seeds, Cions and Cuttings, Layers and Roots.

THEIR MEETINGS—QUORUM: At all meetings of the Trustees seven (7) shall constitute a quorum for the transaction of business; and a meeting of the Trustees may at any time be called, on the application of three (3) members of the Board to the President of the Society; and all meetings of the Trustees shall be called by the Secretary. There shall be stated meetings of the Trustees, to be held once in three (3) months.

FINANCE COMMITTEE.

Article 8. There shall be chosen at the Annual Meeting of the Society a Committee of three (3), one member thereof to be elected each and every year, to hold office for the term of three years; said Committee, subject to the control and supervision of the Trustees, shall have the general care and oversight of the lands, buildings and other property of the Society; shall approve all bills against the Treasury before being paid by the Treasurer, except money awarded for Premiums, and shall authorize the Treasurer to invest, for the benefit of the Society, in one or more of the Savings Banks of the City of Worcester, any money not appropriated or necessary for the current expenses of the Society.

AMENDMENTS.

Article 9. The By-Laws may be altered or amended at the Annual Meeting of the Society, by a vote of two-thirds ($\frac{2}{3}$) of the members present; provided, that previous notice shall have been given in the call for the Annual Meeting that the subject of an alteration of the By-Laws is to come before the Society at that meeting.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR

1885.

The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

Worcester, Mass.
CHARLES HAMILTON, PRINTER,
311 MAIN STREET.
1885.

COMMITTEE OF ARRANGEMENTS AND EXHIBITIONS.

James Draper, *Chairman.*
James F. Allen.
George Cruickshanks.

Calvin L. Hartshorn,
Hermann F. A. Lange,
Newell Wood,
W. W. Cook,
O. B. Hadwen,
Charles E. Parker,
William H. Earle,
Charles E. Brooks,
Adin A. Hixon,
Charles Greenwood.

President—Francis H. Dewey.
Secretary—Edward W. Lincoln.

Nos. 5 Oak, and 18 Front Streets.

JUDGES OF AWARD.

Flowers, Plants, Etc.—Hermann F. A. Lange.
Fruits, Etc.—James Draper.
Vegetables, Etc.—Charles Greenwood.

COMMITTEE ON NOMENCLATURE.

James F. Allen,
Hermann F. A. Lange,
George E. Francis,
O. B. Hadwen,
James Draper.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premium must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small Fruits* must be entered in boxes or baskets (except in the case of Strawberries, which are to be shown "*flat*"); but they may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

E. No person can compete for more than one premium with the same variety of Flower or Fruit: nor can any person take more than one premium under the same number.

F. The Judges may correct, before the close of any Exhibition, awards made by them, if satisfied that such were erroneous.

G. The cards of competitors shall be put, reversed, beneath the plates; and the Judges of Award shall be excluded from the Hall of Exhibition until the Exhibition itself is ready for judgment.

H. Competitors are expected to conform strictly to the conditions under which articles are invited. Evasion or violation of them may be reported to the TRUSTEES for future disqualification of the offender.

RULES AND REGULATIONS.

1. Exhibitions will be held once a fortnight as follows;—Thursday, February 5th and 19th, and March 5th and 19th. Thereafter, commencing April 9th, there will be Exhibitions every Thursday afternoon until and including October 29th, A. D., 1885. The hours of exhibition will be between 3 and 4.30 o'clock. Articles offered for premium must be in the Hall by

2.15 o'clock P. M. of the days of exhibition. Between 2.15 and 3 o'clock the Hall will be in exclusive charge of the Secretary, and the Librarian, who will allow no one else to be present. The Judges of Award may be admitted under the limitations of General Rule G.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, *within the County of Worcester*, for a period of at least one (1) month previous to the date of exhibition.

3. After the articles are arranged they will be under the exclusive charge of the Judges, and *not even the owners* will have liberty to *remove* them until the exhibition is closed; when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits or Vegetables is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Judges to *exclude from competition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste. The Judge of Fruits, in making Awards, will especially regard uniformity in size, symmetry of form, and beauty in color.

7. The Committee of Arrangements have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary; and the Secretary is requested to give notice of one week, in some daily paper, and also at the preceding Exhibition, when a change in the Schedule is proposed.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhib-

iting the same variety of Fruit or Vegetables, under different names, or exhibiting as grown by himself, Flowers, Fruit or Vegetables grown by another, thereby violating the objects and rules of the Society, shall be debarred from competing for the Society's premiums until reinstated.

9. No Flowers, Plants, Fruits or Vegetables will be entitled to a premium unless they possess points of superiority; and the Judges are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them; nor shall any specimen for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

12. In all exhibitions of Cut Flowers, the use of foliage must be restricted to that of the varieties shown; and not more than three blooms, clusters, or spikes, all which shall be of one color, and of one variety, shall be allowed in the same bottle, except when otherwise specified in the schedule.

12. No Judge shall award a premium or gratuity in any case wherein he is a competitor, or has an actual or resultant interest: in any such case the judgment shall be rendered by any three of the Committee of Arrangements and Exhibitions whom the Judge shall invite.

13. No Judge shall require anything of competitors respecting their exhibits, which is not distinctly specified in the schedule. No Flowers, Fruits, etc., etc., shall be put on the tables, for competition for premiums, by any person who is a judge as to the awards to be made for Fruits, Flowers, etc., etc.

14. The standard number required for an exhibit, whether of Fruits or Vegetables, will be Twelve (12); unless otherwise specifically declared. The usual limit of measure save for Small Fruits, will be a half peck.

15. All premiums that are not claimed within three months after the close of the official year shall be forfeited to the Society.

16. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

17. "Downing's Fruits of America," revised edition, will guide the Judge of Fruits in his decisions upon matters at issue.

☞ The Judges are authorized by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

FLOWERS, PLANTS, FRUITS & VEGETABLES.

A. D. 1885.

☞ The COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS would direct the earnest attention of the Judges to *Rule* 6!

6. *It will be the duty of the Judges to exclude from competition all inferior specimens. Also, all such designs as, in their opinion, evince an incorrect taste. The Judge of Fruits, in making Awards, will especially regard uniformity in size, symmetry of form, and beauty in color.*

FLORAL. SPECIAL RULE—In all cases where dimensions are prescribed for exhibits, the measure shall be understood to be that of the flowers, solely; never admitting the basket, foliage, or any garniture of green.

Thursday, February 5.

HYACINTH,—IN BLOOM.—

No. 1.	Six plants, three premiums.....	$3 00	2 00	1 00
No. 2.	One plant, two premiums.....		1 00	50

PRIMULA SINENSIS,—IN BLOOM.—

No. 3.	Four plants, three premiums.....	$3 00	2 00	1 00
No. 4.	One plant, two premiums.....		1 00	50

APPLE.—

No. 5.	Fameuse, three premiums.....	$1 50	1 00	50
No. 6.	Tompkins Co. King, three premiums	$1 50	1 00	50

PEAR.—

No. 7.	Easter, two premiums.....		$1 50	1 00
No. 8.	Any other variety (named), gratuity.			

VEGETABLE.—

No. 9.	CABBAGE, Brunswick, 3 specimens, three premiums.....	$1 50	1 00	50
No. 10.	SQUASH, Marblehead, 3 specimens, three premiums.....	1 50	1 00	50
No. 11.	CELERY, six heads, three premiums.	1 50	1 00	50

Thursday, February 19.

CINERARIA,—IN BLOOM.

No. 12.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

CYCLAMEN,—IN BLOOM.—

No. 13.	Four plants, three premiums.....	$3 00	2 00	1 00
No. 14.	One plant, three premiums.....	1 50	1 00	50

APPLE.—

No. 15.	Golden Russet, of Massachusetts, three premiums.....	$1 50	1 00	50
No. 16.	Golden Russet (sweet), two premiums		1 00	50
No. 17.	Leicester Sweet, three premiums..	1 50	1 00	50
No. 18.	Northern Spy, four premiums	2 00	1 50	1 00	50

PEAR.—

No. 19. Any variety, gratuity.

VEGETABLE.—

No. 20.	CABBAGE, 3 specimens, Savoy, three premiums	$1 50	1 00	50
No. 21.	SQUASH, 3 specimens, Hubbard, three premiums	1 50	1 00	50
No. 22.	TURNIP (*White Egg*), three premiums	1 50	1 00	50

Thursday, March 5.

HYACINTH,—IN BLOOM.—

No. 23.	Six plants, three premiums	$3 00	2 00	1 00
No. 24.	One plant, two premiums		1 00	50

CUT FLOWERS.—

No. 25.	For stand of twenty-four blooms or clusters, distinct, three premiums	$3 00	2 00	1 00

AZALEA INDICA,—IN BLOOM.—

No. 26.	Three plants, three premiums	$5 00	3 00	2 00
No. 27.	One plant, two premiums		3 00	2 00

APPLE.—

No. 28.	Baldwin, three premiums	$1 50	1 00	50
No. 29.	Belleflower (Yellow), three premiums	1 50	1 00	50
No. 30.	Cogswell, two premiums		1 00	50
No. 31.	Greening (R. I.), three premiums	1 50	1 00	50
No. 32.	Ladies' Sweet, two premiums		1 00	50

PEAR.—

No. 33. Any variety, gratuity.

VEGETABLE.—

No 34.	CABBAGE, 3 specimens, Red Dutch, three premiums	$1 50	1 00	50
No. 35.	TURNIP, 6 specimens, Swede (Yellow), three premiums	1 50	1 00	50
No. 36.	TURNIP, 6 specimens, Swede (White), three premiums	1 50	1 00	50

Thursday, March 19.

ARUM (RICHARDIA),—IN BLOOM.—

No. 37.	Best collection; grown in pot, or tub, not exceeding 16 in. in diameter, three premiums	$3 00	2 00	1 00
No. 38.	One bloom, with foliage (the largest), two premiums		1 00	50

BOUQUET—(HAND).—

No. 39.	Not more than 9 in. in diameter, three premiums	$3 00	2 00	1 00

APPLE.—

No. 40.	Peck, three premiums	$1 50	1 00	50
No. 41.	Sutton, three premiums	1 50	1 00	50
No. 42.	Tallman, three premiums	1 50	1 00	50
No. 43.	Palmer, two premiums		1 00	50

PEAR.—

No. 44. Any variety, gratuity.

VEGETABLE.—

No. 45.	BEET, Turnip, three premiums	$1 50	1 00	50
No. 46.	CARROT, Intermediate, three premiums	1 50	1 00	50
No. 47.	LETTUCE, six heads, three premiums	2 00	1 50	1 00

Thursday, April 9.

CUT FLOWERS—BASKET.—

No. 48.	For the best round basket, on stand, not to exceed 15 inches in diameter, three premiums.....	$3 00	2 00	1 00
No. 49.	For the best stand, three premiums.	3 00	2 00	1 00

ZONALE GERANIUM,—IN BLOOM.—

No. 50.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

POT PLANTS,—IN BLOOM.—

No. 51. Gratuity.

APPLE.—

No. 52.	Russet (Golden), three premiums..	$1 50	1 00	50
No. 53.	Russet (Red), three premiums....	1 50	1 00	50
No. 54.	Russet (Roxbury), three premiums	1 50	1 00	50
No. 55.	Spitzenberg, three premiums.....	1 50	1 00	50

PEAR.—

No. 56. Any variety, gratuity.

VEGETABLE.—

No. 57.	PARSNEP (Hollow Crown), three premiums.....	$1 50	1 00	50
No. 58.	RADISH, two bunches (6 in each bunch), three premiums.....	2 00	1 50	1 00
No. 59.	LETTUCE, six heads, three premiums	1 50	1 00	50
	POTATOES.			
No. 60.	Clark's No. 1, three premiums....	1 50	1 00	50
No. 61.	Beauty of Hebron, three premiums	1 50	1 00	50
No. 62.	SQUASH, three specimens, three premiums	1 50	1 00	50

Thursday, April 16.

BEGONIA,—IN BLOOM.—

No. 63. One plant, three premiums.....$3 00 2 00 1 00

CUT FLOWERS.—

No. 64. One stand, three premiums.....$3 00 2 00 1 00

APPLE.—

No. 65. Any variety, gratuity.

VEGETABLE.—

No. 66. HORSE RADISH, three premiums ..$1 50 1 00 50
No. 67. PARSNEP (Student), three premiums 1 50 1 00 50
No. 68. RHUBARB, same variety, three premiums..... 1 50 1 00 50

Thursday, April 23.

PANSY—NO DUPLICATES.—

No. 69. One stand, and one spike to a vial, three premiums.....$3 00 2 00 1 00

CUT FLOWERS.—

No. 70. HANDLE BASKET, low oval, not to exceed 15 inches in diameter, three premiums.....$3 00 2 00 1 00

APPLE.—

No. 71. Any variety, gratuity.

VEGETABLE.—

No. 72.	Dandelion (cultivated), one half-peck, three premiums	$1 50	1 00	50
No. 73.	Spinach, one half-peck, three premiums	$1 50	1 00	50

Thursday, April 30.

POT PLANTS,—in bloom.—

No. 74. Gratuity.

VEGETABLE.—

No. 75.	Cucumber, three, three premiums	$1 50	1 00	50
No. 76.	Lettuce, six heads, three premiums	1 50	1 00	50
No. 77.	Salsify, three premiums	1 50	1 00	50

Thursday, May 7.

PANSY,—in bloom.—

No. 78.	Six plants, distinct in color, grown in pots, three premiums	$3 00	2 00	1 00

BOUQUET,—hand.—

No. 79.	Not to exceed 9 inches in diameter, three premiums	$3 00	2 00	1 00

VEGETABLE.—

No. 80.	Asparagus, two bunches, three premiums	$1 50	1 00	50
No. 81.	Dandelions, half-peck (cultivated), three premiums	1 50	1 00	50
No. 82.	Spinach, half-peck, three premiums	1 50	1 00	50

Thursday, May 14.

BASKET,—ON STAND.—

No. 83. Not to exceed fifteen inch oval, with handle, three premiums.... $3 00 2 00 1 00

BULBS—(HARDY),—OPEN CULTURE.—

No. 84. Three premiums..... $3 00 2 00 1 00

HYACINTH,—OPEN CULTURE.—

No. 85. Display, three premiums..... $3 00 2 00 1 00

VEGETABLE.—

No. 86. ASPARAGUS, two bunches, three premiums $1 50 1 00 50

Thursday, May 21.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 87. Stand, three premiums..... $3 00 2 00 1 00

PELARGONIUM—(FANCY AND SHOW),—IN BLOOM.—

No. 88. Four plants, of distinct varieties, three premiums..... $3 00 2 00 1 00

TULIP,—OPEN CULTURE.—

No. 89. Display, three premiums..... $3 00 2 00 1 00

VEGETABLE.—

RHUBARB,

No. 90. Linneæs, three premiums..... $1 50 1 00 50
No. 91. Victoria, three premiums..... 1 50 1 00 50
No. 92. Gratuity.

Thursday, May 28.

CUT FLOWERS—(From Hardy Plants and Shrubs).—

No. 93.	For the best display, open culture, three premiums	$3 00	2 00	1 00

RHODODENDRON.—

No. 94.	For the best display, three premiums	$3 00	2 00	1 00

AZALEA—(Ghent).—

No. 95.	For the best display, three premiums	$3 00	2 00	1 00

AZALEA—(Mollis).—

No. 96.	For the best display, three premiums	$3 00	2 00	1 00

VEGETABLE.—

No. 97.	Radish, three premiums	$1 50	1 00	50
No. 98.	Onion (bunched), two bunches, six in each bunch, three premiums	1 50	1 00	50

Thursday, June 4.

FUCHSIA,—distinct varieties.—

No. 99.	Four plants in bloom, three premiums	$3 00	2 00	1 00

IRIS.—

No. 100.	For the best display, three premiums	$3 00	2 00	1 00

VEGETABLE.—

No. 101. Gratuity.

Thursday, June 11.

CUT FLOWERS.—

No. 102.	One Stand—(the varieties of any species must not exceed three), three premiums	$3 00	2 00	1 00
No. 103.	One Vase,—the specimens not to be tied or wired, two premiums.		2 00	1 00

PÆONIA.—

No. 104.	For the best display, three premiums	$3 00	2 00	1 00

VEGETABLE.—

No. 105.	Beet (Early), three premiums	$1 50	1 00	50
No. 106.	Pea,—Half-peck, three premiums	2 00	1 50	1 00

Thursday, June 18.

ROSES—

[To be shown in the Boxes or Vases of the Society.]

No. 107.	For the best blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums	$4 00	3 00	2 00
No. 108.	For the best six blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums	3 00	2 00	1 00
No. 109.	For the best stand of Roses, three premiums	3 00	2 00	1 00
No. 110.	Moss Roses. Best display, three premiums	3 00	2 00	1 00
No. 111.	For the best basket or dish of Roses, two premiums.		2 00	1 00

No. 112.	*Dianthus barbatus*—(Sweet William).—Stand, three premiums.	3 00	2 00	1 00
No. 113.	*Digitalis* — (Foxglove). — Best display, two premiums.....		2 00	1 00
No. 114.	*Campanula media* — (Canterbury Bell.)—Best display, two premiums		2 00	1 00

STRAWBERRY.—

No. 115.	Crystal City, 24 berries, flat, three premiums	$1 50	1 00	50
No. 116.	Downer's Prolific, 24 berries, flat, three premiums.....	1 50	1 00	50
No. 117.	Jersey Queen, 24 berries, flat, three premiums.....	1 50	1 00	50
No. 118.	Any other varieties, gratuity.			

VEGETABLE.—

No. 119.	Pea, one-half peck, four premiums	$2 00	1 50	1 00	50
No. 120.	Lettuce, six heads, three premiums	1 50	1 00	50
No. 121.	Spinach, half-peck, three premiums	1 50	1 00	50

Thursday, June 25.

HYDRANGEA,—one plant, in bloom.—

No. 122.	Hortensis, two premiums.....	$2 00	1 00
No. 123.	Otaksa, two premiums.....	2 00	1 00
No. 124.	Thomas Hogg, two premiums..	2 00	1 00

BASKET.—Oval, flat, not to exceed 18 inches.

No. 125.	Amateur,—three premiums.....	$3 00	2 00	1 00
No. 126.	Florist,—three premiums.....	3 00	2 00	1 00

BOUQUET—(PARLOR).—

No. 127.	AMATEUR,—three premiums.....	$3 00	2 00	1 00
No. 128.	FLORIST,—three premiums.....	3 00	2 00	1 00

PÆONIA.—

No. 129. Best display, gratuity.

STRAWBERRY.—

No. 130.	Bidwell, 24 berries, flat, three premiums	$1 50	1 00	50
No. 131.	Charles Downing, 24 berries, flat, four premiums	2 00 1 50	1 00	50
No. 132.	Crescent, 24 berries, flat, three premiums	1 50	1 00	50
No. 133.	Cumberland Triumph, 24 berries, flat, three premiums.....	1 50	1 00	50
No. 134.	Sharpless, 24 berries, flat, four premiums.....	2 00 1 50	1 00	50
No. 135.	Wilder, 24 berries, flat, three premiums	1 50	1 00	50
No. 136.	Wilson, 24 berries, flat, four premiums.....	2 00 1 50	1 00	50
No. 137.	Any other variety, 24 berries, gratuity.			

VEGETABLE.—

No. 138.	BEET, summer, turnip-rooted, three premiums.....	$2 00	1 50	1 00
	PEA,			
No. 139.	American Wonder, one-half peck, three premiums	2 00	1 50	1 00
No. 140.	McLean's Advancer, one-half peck, three premiums	2 00	1 50	1 00

Thursday, July 2.

CLEMATIS,—DISPLAY.—

No. 141.	Of not less than six named varieties, three premiums.....	$3 00	2 00	1 00

LILIUM.—

No. 142.	For the best display, two premiums		$2 00	1 00

CUT FLOWERS.—

No. 143.	For the best arranged stand, without restriction as to foliage, varieties, or quantity of flowers, three premiums	$3 00	2 00	1 00

HARDY FLOWERS.—Biennials and Perennials.—

No. 144.	For the best stand, three premiums	$3 00	2 00	1 00

STRAWBERRY.—

No. 145.	Bidwell, 24 berries, flat, four premiums	$2 00	1 50	1 00	50
No. 146.	Jucunda, 24 berries, flat, four premiums	2 00	1 50	1 00	50
No. 147.	Manchester, 24 berries, flat, three premiums		1 50	1 00	50
No. 148.	Miner's Prolific, 24 berries, flat, four premiums	2 00	1 50	1 00	50
No. 149.	Monarch, 24 berries, three premiums		1 50	1 00	50
No. 150.	Triomphe de Gand, 24 berries, flat, three premiums		1 50	1 00	50
No. 151.	Any other variety, 24 berries, flat, gratuity.				

VEGETABLE.—

No. 152.	Bean (Snap), Green Pod, one-half peck, three premiums	$1 50	1 00	50

PEA.—

No. 153. Any variety, gratuity.

Thursday, July 9.

AQUILEGIA.—(COLUMBINE).—

No. 154.	For the best stand, three premiums	$3 00	2 00	1 00

ZONALE GERANIUMS.—

No. 155.	For the best stand, 1 truss in a vial, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—

No. 156.	For the best stand, of 24 named varieties, three premiums	$3 00	2 00	1 00
No. 157.	LILIUM CANDIDUM, 12 spikes, three premiums	3 00	2 00	1 00

RASPBERRY—(RED).—

No. 158.	Brandywine, one quart, three premiums	$1 50	1 00	50
No. 159.	Hansell, one quart, three premiums	1 50	1 00	50

BLACKCAP.—

No. 160.	Davison, one quart, two premiums		$1 00	50
No. 161.	Doolittle, one quart, two premiums		1 00	50

CHERRY.—

No. 162.	Any variety, one quart, three premiums	$1 50	1 00	50

CURRANT.—

No. 163.	Red Dutch, one quart, three premiums	$1 50	1 00	50
No. 164.	White Grape, one quart, three premiums	1 50	1 00	50
No. 165.	White Dutch, one quart, three premiums	1 50	1 00	50
No. 166.	Any other variety, one quart, gratuity.			

STRAWBERRY.—

No. 167. Any variety, 24 berries, flat, gratuity.

VEGETABLE.—

No. 168.	BEET, Turnip-rooted, three premiums	$1 50	1 00		50

PEA.—

No. 169.	Yorkshire Hero, three premiums	$2 00	1 50	1 00	
No. 170.	Champion of England, three premiums	2 00	1 50	1 00	
No. 171.	Any other variety, gratuity.				
No. 172.	POTATO, gratuity.				
No. 173.	CABBAGE, 3 specimens, gratuity.				

Thursday, July 16.

GLOXINIA,—IN POTS.—

No. 174.	Six varieties in bloom, three premiums	$3 00	2 00	1 00	

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 175.	Stand, three premiums	$3 00	2 00	1 00	

HOLLYHOCK,—DOUBLE.—

No. 176.	For the best stand, one flower in each vial, three premiums	$3 00	2 00	1 00	

CURRANT.—

No. 177.	La Versaillaise, one quart, five premiums	$3 00	2 00	1 50	1 00	50
No. 178.	Red Dutch, one quart, five premiums	3 00	2 00	1 50	1 00	50
No. 179.	White Dutch, one quart, three premiums	1 50	1 00			50

No. 180.	White Grape, one quart, two premiums		1 00	50
No. 181.	Any other variety, gratuity.			

RASPBERRY.—

No. 182.	Brincklé's Orange, one quart, three premiums	$1 50	1 00	50
No. 183.	Clarke, one quart, three premiums	1 50	1 00	50
No. 184.	Franconia, one quart, three premiums	1 50	1 00	50
No. 185.	Hornét, one quart, three premiums	1 50	1 00	50
No. 186.	Hudson River Antwerp, one quart, three premiums	1 50	1 00	50
No. 187.	Northumberland, one quart, three premiums	1 50	1 00	50
No. 188.	Turner, one quart, three premiums	1 50	1 00	50
No. 189.	Cuthbert, one quart, three premiums	1 50	1 00	50
No. 190.	Herstine, one quart, three premiums	1 50	1 00	50
No. 191.	Any other variety, gratuity.			

BLACKCAP.—

No. 192.	Gregg, one quart, two premiums.		1 00	50
No. 193.	Mammoth Cluster, one quart, two premiums		1 00	50

VEGETABLE.—

No. 194.	POTATO, Beauty of Hebron, three premiums	$2 00	1 50	1 00
No. 195.	BEAN—(snap), Early Valentine, three premiums	2 00	1 50	1 00
No. 196.	Wax—(snap), three premiums	2 00	1 50	1 00

Thursday, July 23.

FLOWERS,—SEEDLINGS OF 1885.—

No. 197.	Stand, three premiums.....	$3 00	2 00	1 00

BASKET.—Round, flat, not to exceed 18 in. in diameter.

No. 198.	AMATEUR,—three premiums.....	$3 00	2 00	1 00
No. 199.	FLORIST,—three premiums.....	3 00	2 00	1 00

PETUNIA.—One spray in each vial.

No. 200.	Stand, three premiums.....	$3 00	2 00	1 00

SWEET PEA.—*Best Varieties.*—

No. 201.	Stand,—not exceeding twelve stems in a bottle, three premiums	$3 00	2 00	1 00

IRIS KÆMPFERI.—

No. 202.	Best display, three premiums...	$3 00	2 00	1 00

RASPBERRY.—

No. 203. Any variety, one quart, gratuity.

BLACKBERRY.—

No. 204.	Kittatinny, one quart, two premiums		1 00	50
No. 205.	Snyder, one quart, two premiums		1 00	50
No. 206.	Wachusett, one quart, two premiums		1 00	50
No. 207.	Any other variety, gratuity.			

VEGETABLE.—

CABBAGE,

No. 208.	Brunswick, 3 specimens, three premiums	$1 50	1 00	50
No. 209.	Henderson, three premiums....	1 50	1 00	50

CORN.—(SWEET).—

No. 210.	Any named variety, three premiums	$2 00	1 50	1 00	

POTATO.—

No. 211.	Any variety, gratuity.				
No. 212.	SQUASH, Four Summer Crookneck, two premiums		$1 00		50
No. 213.	Four Scallop, two premiums		1 00		50

TOMATO.—

No. 214.	Any named variety, three premiums	$2 00	1 50	1 00	

Thursday, July 30.

CUT FLOWERS,—GROWN FROM SEED. *By Exhibitor.*

No. 215.	Stand of distinct varieties, three premiums	$3 00	2 00	1 00	

BOUQUET—PARLOR.—Not to exceed 15 in. from base to tip.

No. 216.	AMATEUR,—three premiums	$3 00	2 00	1 00	
No. 217.	FLORIST,—three premiums	3 00	2 00	1 00	

PHLOX DRUMMONDI.—

No. 218.	Stand of best varieties, three premiums	$3 00	2 00	1 00	

VERBENA,—BEST VARIETIES.—

No. 219.	Stand, one truss in a vial, three premiums	$3 00	2 00	1 00	

PEAR.—

No. 220.	D'Eté, four premiums	$2 00	1 50	1 00	50

GOOSEBERRY.—

No. 221. One quart of any named variety, gratuity.

VEGETABLE.—

BEAN,

No. 222.	Dwarf Horticultural (shell), half-peck, three premiums	$1 50	1 00	50
No. 223.	Any other (named) variety, three premiums	1 50	1 00	50
No. 224.	CORN (Sweet), three premiums	1 50	1 00	50

Thursday, August 6.

HOLLYHOCK.—

No. 225.	For the best display, a single spike in a vial (no duplicates), four premiums	$4 00	3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES, NAMED.—

No. 226.	Twenty blooms, or clusters, three premiums	$3 00	2 00	1 00

GLADIOLUS,—NAMED.—

No. 227.	Eighteen vases, one spike each, three premiums	$3 00	2 00	1 00

APPLE.—

No. 228. Any variety, gratuity.

PEAR.—

No. 229.	Giffard, three premiums	$1 50	1 00	50
No. 230.	D'Eté, two premiums		1 50	1 00

VEGETABLE.—

No. 231.	CORN, Crosby, two premiums...		$1 50	1 00	
No. 232.	CUCUMBER, 4 specimens, two premiums		1 00	50	
No. 233.	TOMATO, Acme, three premiums..	1 50	1 00	50	

Thursday, August 13.

ANTIRRHINUM,—SNAP DRAGON.—

No. 234.	Stand, best varieties, three premiums	$3 00	2 00	1 00	

GERMAN STOCKS,—BEST VARIETIES.—

No. 235.	Stand, three premiums.....	$3 00	2 00	1 00	

BEGONIA—(TUBEROUS-ROOTED),—IN BLOOM.—

No. 236.	Best six plants, in pots, three premiums	$3 00	2 00	1 00	

PINK—(ALL KINDS.)—

No. 237.	Stand, three premiums.....	$3 00	2 00	1 00	

APPLE.—

No. 238.	Astrachan (Red), three premiums	$1 50	1 00	50	
No. 239.	Oldenburg, three premiums....	1 50	1 00	50	

PEAR.—

No. 240.	Giffard, four premiums..	$2 00	1 50	1 00	50

VEGETABLE.—

No. 241.	Bean (shell), Concord, half-peck, in pods, two premiums.....		$1 50	1 00
No. 242.	Tomato, Livingston's Perfection, three premiums.....	1 50	1 00	50

Thursday, August 20.

ASTER.—

No. 243.	Rose, eighteen vials, one spray in each, three premiums.....	$2 00	1 00	50
No. 244.	Hedgehog, eighteen vials, one spray in each, three premiums..	2 00	1 00	50
No. 245.	Cocardeau (Crown), eighteen vials, one spray in each, three premiums	2 00	1 00	50
No. 246.	Victoria, eighteen vials, one spray in each, three premiums.....	2 00	1 00	50
No. 247.	Boltzés, eighteen vials, one whole plant in each, three premiums..	2 00	1 00	50
No. 248.	Pompon, stand, one spray in each vial, three premiums.....	3 00	2 00	1 00
No. 249.	Truffant, — Pæony-flowered, stand, one spray in each vial, three premiums.....	3 00	2 00	1 00

GLADIOLUS—(distinct varieties named.)—

No. 250.	Eighteen, 1 spike each, three premiums	$4 00	3 00	2 00

SALPIGLOSSIS.—

No. 251.	For the best stand, three premiums	$3 00	2 00	1 00

APPLE.—

No. 252.	Astrachan, three premiums.....	$1 50	1 00	50
No. 253.	Oldenburg, three premiums.....	1 50	1 00	50
No. 254.	Tetofsky, three premiums.....	1 50	1 00	50

APRICOT.—

No. 255.	Any variety, gratuity.....			$1 00	50

PEAR.—

No. 256.	Clapp's Favorite, four premiums	$2 00	1 50	1 00	50

PEACH.

No. 257.	Alexander, three premiums.....	$1 50		1 00	50
No. 258.	Beatrice, three premiums.....	1 50		1 00	50
No. 259.	Cole's Early Red, two premiums.			1 00	50
No. 260.	Waterloo, two premiums.....			1 00	50

VEGETABLE.—

SQUASH,

No. 261.	Marrow, 3 specimens, three premiums.....	$1 50		1 00	50
No. 262.	Turban, 3 specimens, three premiums..	2 00		1 50	1 00

TOMATO,

No. 263.	Paragon, three premiums.....	1 50		1 00	50

CORN,

No. 264.	Sweet, twelve ears, of not less than twelve rows, three premiums...	1 50		1 00	50

Thursday, August 27.

CUT FLOWERS,—DISTINCT VARIETIES.

No. 265.	Stand, three premiums.....	$3 00		2 00	1 00

DELPHINIUM.—

No. 266.	Stand, best varieties, three premiums	$3 00		2 00	1 00

GERANIUM—(NAMED.)—

No. 267.	Stand, one truss in each vial, three premiums	$3 00		2 00	1 00

GLADIOLUS—(NO DUPLICATES.)—

No. 268.	Stand, three premiums	$3 00	2 00	1 00

PHLOX—PERENNIAL.—

No. 269.	Stand, three premiums	$3 00	2 00	1 00

APPLE.—

No. 270.	Sweet Bough, three premiums	$1 50	1 00	50
No. 271.	Somerset, three premiums	1 50	1 00	50
No. 272.	Williams, two premiums		1 00	50

PEAR.—

No. 273.	Clapp's Favorite, five premiums	$3 00	2 00	1 50	1 00	50
No. 274.	Rostiezer, three premiums			1 50	1 00	50
No. 275.	Tyson, three premiums			1 50	1 00	50
No. 276.	Assomption, three premiums			1 50	1 00	50

PEACH.—

No. 277.	Hale, three premiums	$1 50	1 00	50
No. 278.	Rivers, three premiums	1 50	1 00	50

VEGETABLE.—

BEAN—(HALF-PECK IN POD.)—

No. 279.	Horticultural (pole), three premiums	$1 50	1 00	50

Thursday, September 3.

BALSAM.—

No. 280.	Stand, one spike in each vial, three premiums	$3 00	2 00	1 00

SCABIOSA.—

No. 281.	Stand, not exceeding 6 flowers in a vial, best variety, three premiums	$3 00	2 00	1 00

ZINNIA.—

No. 282.	Stand, at least twelve varieties, one flower in a vial, two premiums		$2 00	1 00

LILIUM JAPONICUM.—

No. 283.	Best display, three premiums	$3 00	2 00	1 00

MARIGOLD.—

No. 284.	Stand, two premiums		$2 00	1 00

APPLE.—

No. 285.	Golden Sweet, two premiums		$1 00	50
No. 286.	Williams, two premiums		1 00	50

NECTARINE.—

No. 287.	Any variety, two premiums		$1 00	50

PEAR.—

No. 288.	Tyson, two premiums		$1 50	1 00
No. 289.	Petite Marguerite, two premiums		1 00	50

PEACH.—

No. 290.	Cooledge, two premiums		$1 00	50
No. 291.	George Fourth, two premiums		1 00	50
No. 292.	Foster, two premiums		1 00	50
No. 293.	Richmond, two premiums		1 00	50

PLUM.—

No. 294.	Imperial Gage, two premiums...	$1 00	50
No. 295.	Quackenboss, two premiums....	1 00	50
No. 296.	Washington, two premiums.....	1 00	50
No. 297.	Bradshaw, two premiums.....	1 00	50
No. 298.	Gen. Hand, two premiums.....	1 00	50
No. 299.	Victoria, two premiums.....	1 00	50

VEGETABLE.—

No. 300.	Best collection, three premiums..	$4 00	3 00	2 00

Thursday, September 10.

BOUQUET—(PARLOR.)—

Best, loosely arranged.

No. 301.	Amateur, three premiums.....	$3 00	2 00	1 00
No. 302.	Florist, three premiums.....	3 00	2 00	1 00

DAHLIA—one in a vial.—

Large-Flowered,

No. 303.	Stand, best variety, three premiums	$3 00	2 00	1 00

Pompon,

No. 304.	Stand, one in a vial, three premiums	3 00	2 00	1 00

Single,

No. 305.	Best six blooms, two premiums ..		1 00	50

NASTURTIUM AND TROPÆOLUM.—

No. 306.	Stand, best varieties, not more than twelve blooms in each bottle, three premiums.....	$3 00	2 00	1 00

APPLE.—

No. 307.	Worcester Spy, two premiums.			$1 00	50

APPLE—(Crab.)—

No. 308.	Transcendent, 24, three premiums..	$1 50		1 00	50

PEAR.—

No. 309.	Ansault, three premiums.....	$1 50		1 00	50
No. 310.	Bartlett, three premiums.....	1 50		1 00	50
No. 311.	Lucrative, three premiums.....	1 50		1 00	50
No. 312.	Earle's Bergamot, three premiums	1 50		1 00	50
No. 313.	St. Ghislain, four premiums	2 00	1 50	1 00	50

PEACH.—

No. 314.	Crawford (Early), two premiums.			$1 00	50
No. 315.	Oldmixon, two premiums.....			1 00	50

PLUM.—

No. 316.	Jefferson, two premiums.....			$1 00	50
No. 317.	Lombard, two premiums.....			1 00	50
No. 318.	Munroe, two premiums.....			1 00	50
No. 319.	McLaughlin, two premiums.....			1 00	50

VEGETABLE.—

Cucumber,

No. 320.	Half-peck (for pickles), three premiums	$1 50		1 00	50

Bean,

No. 321.	Lima (large), half-peck, best, three premiums	1 50		1 00	50

PEPPER.—

No. 322.	Squash, two premiums.....			$1 00	50
No. 323.	Large Bell, twe premiums.... .			1 00	50
No. 324.	Mammoth, two premiums.....			1 00	50

Thursday, September 17.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 325.	Twenty blooms, or clusters, three premiums	$3 00	2 00	1 00

GERANIUM,—OPEN CULTURE.—One truss in a vial.—

No. 326.	Stand, three premiums	$3 00	2 00	1 00

PANSY,—WITH FOLIAGE.—

No. 327.	Stand, one spike in each bottle, three premiums	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 328.	Combination, three premiums	$3 00	2 00	1 00

APPLE.—

No. 329.	Foundling, two premiums			$1 00	50
No. 330.	Golden Sweet, two premiums			1 00	50
No. 331.	Gravenstein, four premiums	$2 00	1 50	1 00	50

PEAR.—

No. 332.	Bartlett, five premiums	$3 00	2 00	1 50	1 00	50
No. 333.	Pratt, two premiums				$1 00	50

PLUM.—

No. 334.	Coe's Golden Drop, two premiums	$1 00	50
No. 335.	Reine Claude de Bavay, two premiums	1 00	50

PEACH.—

No. 336.	Crawford (Early), two premiums.		$1 00	50
No. 337.	Oldmixon, two premiums.....		1 00	50

MELON.—

No. 338.	Yellow Flesh, three specimens, two premiums.....		1 00	50
No. 339.	Green Flesh, three, two premiums		1 00	50
	WATER,			
No. 340.	Two specimens, two premiums..		1 00	50

VEGETABLE.—

	CABBAGE,			
No. 341.	Deep Head, 3 specimens, three premiums	$1 50	1 00	50
No. 342.	Savoy, 3 specimens, three premiums	1 50	1 00	50

Thursday, September 24.

ASTER.—

No. 343.	Stand, three premiums.....	$3 00	2 00	1 00

BASKET—CUT FLOWERS.—

	Best, not to exceed fifteen inches, oval, with handle, on stand,			
No. 344.	AMATEUR,—three premiums.....	$3 00	2 00	1 00
No. 345.	FLORIST,—three premiums.....	3 00	2 00	1 00

VERBENA.—

No. 346.	Stand, best, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS—Stand.—

No. 347.	Three premiums	$3 00	2 00	1 00

APPLE.—

No. 348.	Porter, four premiums	$2 00	1 50	1 00	50
No. 349.	Garden Royal, two premiums			1 00	50
No. 350.	American Beauty, two premiums			1 50	1 00

APPLE—Crab.—

No. 351.	Hyslop, 24, two premiums			$1 00	50

PEAR.—

No. 352.	Boussoc, two premiums			$1 00	50
No. 353.	Durandeau, three premiums		1 50	1 00	50
No. 354.	Merriam, two premiums			1 00	50
No. 355.	Paradis d'Automne, four premiums	2 00	1 50	1 00	50
No. 356.	Seckel, three premiums		1 50	1 00	50
No. 357.	Any other variety, two premiums			1 00	50

PEACH.—

No. 358.	Crawford (Late), two premiums			$1 00	50
No. 359.	Salway (free), two premiums			1 00	50
No. 360.	Smock, two premiums			1 00	50
No. 361.	Stump the World, two premiums			1 00	50
No. 362.	Any other variety, two premiums			1 00	50
No. 363.	New Seedling, originated in Worcester County, three premiums		1 50	1 00	50

GRAPE.—

No. 364.	Moore, three clusters, three premiums	$1 50		1 00	50
No. 365.	Lady, three clusters, two premiums			1 00	50
No. 366.	Lindley, three premiums		1 50	1 00	50

No. 367.	Prentiss, three clusters, two premiums		$1 00	50
No. 368.	Iona, three clusters, three premiums	1 50	1 00	50
No. 369.	Massasoit, three clusters, three premiums	1 50	1 00	50
No. 370.	Salem, three clusters, three premiums	1 50	1 00	50
No. 371.	Wilder, three clusters, three premiums	1 50	1 00	50
No. 372.	Worden, three clusters, three premiums	1 50	1 00	50
No. 373.	Brighton, three clusters, three premiums	1 50	1 00	50

VEGETABLE.—

No. 374.	Carrot, any variety, two premiums		$1 50	1 00
No. 375.	Egg Plant, 4 specimens, three premiums	2 00	1 50	1 00
No. 376.	Martynia, 24 specimens, two premiums		1 50	1 00

Thursday, October 1.

BASKET—(Cut Flowers).—

Not to exceed fifteen in. in diameter, flat, oval.

No. 377.	Amateur,—three premiums	$3 00	2 00	1 00
No. 378.	Florist,—three premiums	3 00	2 00	1 00

STAND—(Cut Flowers.)—

No. 379.	Three premiums	$3 00	2 00	1 00

GLADIOLUS.—

No. 380.	Best display, three premiums....	$3 00	2 00	1 00

APPLE.—

No. 381.	Gravenstein, five premiums	$3 00	2 00	1 50	1 00	50
No. 382.	Holden, three premiums.....			1 50	1 00	50
No. 383.	Lyscom, three premiums.....			1 50	1 00	50
No. 384.	Twenty Ounce, three premiums.			1 50	1 00	50

PEAR.—

No. 385.	Hardy, three premiums.....	$1 50			1 00	50
No. 386.	Louise Bonne de Jersey, five premiums...	$3 00	2 00	1 50	1 00	50
No. 387.	Seckel, five premiums	3 00	2 00	1 50	1 00	50
No. 388.	St. Michel Archange, two premiums				1 00	50
No. 389.	Washington, two premiums.....				1 00	50
No. 390.	Buffum, two premiums.....				1 00	50

PEACH.—

No. 391. Any variety, gratuity.

GRAPE.—

No. 392.	Concord, three clusters, three premiums	$2 00		1 00	50
No. 393.	Delaware, four premiums.	2 00	1 50	1 00	50
No. 394.	Duchesse, two premiums..			1 00	50
No. 395.	Pocklington, two premiums.....			1 00	50
No. 396.	Niagara, two premiums.....			1 00	50
No. 397.	Any other variety, gratuity.				

VEGETABLE.—

CAULIFLOWER,

No. 398.	Three specimens, two premiums .		$1 50	1 00
No. 399.	Best Collection, three premiums.	4 00	3 00	2 00

Thursday, October 8.

CUT FLOWERS.—

No. 400.	Stand, three premiums.....	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 401.	Combination, three premiums...	$3 00	2 00	1 00

APPLE.—

No. 402.	Maiden's Blush, three premiums.	$1 50		1 00	50
No. 403.	Washington Strawberry, two premiums			1 00	50
No. 404.	Any other variety, gratuity.				

PEAR.—

No. 405.	Bosc, five premiums	$3 00	2 00	1 50	1 00	50
No. 406.	Dr. Reeder, three premiums....		1 50		1 00	50
No. 407.	Sheldon, four premiums.	2 00	1 50		1 00	50
No. 408.	Superfin, four premiums...	2 00	1 50		1 00	50
No. 409.	Any other variety, gratuity.					

GRAPE,—OPEN CULTURE.—

No. 410. Any variety, three clusters, gratuity.

QUINCE.—

No. 411.	Champion, three premiums.....	$1 50	1 00	50
No. 412.	Orange, three premiums.....	1 50	1 00	50

VEGETABLE.—

No. 413.	Potato, six varieties (named), three premiums	$2 00	1 50	1 00	
	Squash,				
No. 414.	Hubbard, three, three premiums	1 50	1 00	50	
No. 415.	Marblehead, three specimens, three premiums	1 50	1 00	50	
No. 416.	Essex Hybrid, three premiums	1 50	1 00	50	
No. 417.	Celery, six, three premiums	2 00	1 00	50	

Thursday, October 15.

CUT FLOWERS.—(Bouquet.)—

No. 418.	Style, flat, mantle, not to exceed twelve inches from base to tip, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—(Stand.)—

No. 419.	Three premiums	$3 00	2 00	1 00

APPLE.—

No. 420.	Baldwin, six premiums	$4 00	3 00	2 00	1 50	1 00	50
No. 421.	Tompkins King, four premiums			2 00	1 50	1 00	50
No. 422.	Leicester Sweet, three premiums				1 50	1 00	50
No. 423.	Wealthy, two premiums					1 00	50
No. 424.	Fameuse, three premiums				1 50	1 00	50
No. 425.	Any other variety (named), gratuity.						

PEAR.—

No. 426.	Bosc, four premiums	$2 00	1 50	1 00	50
No. 427.	Dix, three premiums		1 50	1 00	50

No. 428.	Onondaga, three premiums.....	$1 50	1 00	50
No. 429.	Frederick Clapp, two premiums.		1 00	50

GRAPE,—OPEN CULTURE.—

No. 430.	Any variety, three clusters, three premiums	$1 50	1 00	50

QUINCE—

No. 431.	Any variety (named), three premiums	$3 00	2 00	1 00

VEGETABLE.—

No. 432.	KOHL RABI, six specimens, three premiums	$1 50	1 00	50

ONION.—

No. 433.	Red Globe—Half peck, three premiums	$1 50	1 00	50
No. 434.	Yellow Danvers—Half peck, three premiums.....	1 50	1 00	50

SALSIFY.—

No. 435.	Three premiums.....	$1 50	1 00	50

Thursday, October 22.

CUT FLOWERS.—

No. 436. In any form, gratuity.

APPLE.—

No. 437.	McClellan, three premiums.....	$1 50	1 00		50
No. 438.	Sutton, three premiums.....	1 50	1 00		50
No. 439.	R. I. Greening, five premiums	3 00	2 00	1 50	1 00	50
No. 440.	Any other variety (named), gratuity.				

PEAR.—

No. 441.	Anjou, five premiums	$3 00	2 00	1 50	1 00	50
No. 442.	Diel, three premiums.....			1 50	1 00	50
No. 443.	Comice, five premiums	3 00	2 00	1 50	1 00	50
No. 444.	Urbaniste, four premiums	2 00		1 50	1 00	50
No. 445.	Mt. Vernon, two premiums.....				1 00	50

VEGETABLE.—

No. 446.	Best Collection, grown from seed that was itself raised by the competitors, three premiums...	$3 00	2 00	1 00

Thursday, October 29.

FERN—(parlor).—

No. 447.	Best plant, three premiums.....	$2 00	1 00	50

PALM—(parlor).

No. 448.	Best plant, three premiums....	$2 00	1 00	50

POT PLANTS—In bloom.

No. 449. Gratuity.

APPLE.—

No. 450.	Hubbardston, four premiums	$2 00	1 50	1 00	50
No. 451.	Canada Red (Old Nonesuch), three premiums		1 50	1 00	50
No. 452.	Mother, three premiums		1 50	1 00	50
No. 453.	Northern Spy, four premiums	2 00	1 50	1 00	50
No. 454.	Roxbury Russet, four premiums	2 00	1 50	1 00	50
No. 455.	Belle Flower, three premiums		1 50	1 00	50

PEAR.—

No. 456.	Clairgeau, three premiums	$1 50		1 00	50
No. 457.	Langelier, three premiums		1 50	1 00	50
No. 458.	Dana's Hovey, three premiums		1 50	1 00	50
No. 459.	Duchesse d'Angoulême, four premiums	2 00	1 50	1 00	50
No. 460.	Glout Morçeau, three premiums		1 50	1 00	50
No. 461.	Josephine de Malines, three premiums		1 50	1 00	50
No. 462.	Lawrence, five premiums	3 00	2 00	1 50	1 00	50
No. 463.	Winter Nelis, four premiums	2 00	1 50	1 00	50
No. 464.	Sieulle, three premiums		1 50	1 00	50
No. 465.	Vicar, three premiums		1 50	1 00	50

VEGETABLE.—

No. 466.	Collection, four premiums	$4 00	3 00	2 00	1 00
No. 467.	Celeriac, six specimens, three premiums		1 50	1 00	50
No. 468.	Celery, four premiums	4 00	3 00	2 00	1 00

SPECIAL CHRYSANTHEMUM EXHIBITION

ON

Thursday, November 12.

No. 1.	For the best six Chinese, or large-flowered, in pots,—distinct named varieties, three premiums.....	$4 00	3 00	2 00
No. 2.	For the best six Japanese, in pots, distinct named varieties, three premiums	$4 00	3 00	2 00
No. 3.	For the best six Pompon, in pots, distinct named varieties, three premiums	$4 00	3 00	2 00
No. 4.	For the best three plants, in pots, from Amateurs, — distinct (not named), three premiums.....	$2 00	1 50	1 00
No. 5.	For the best display, in pots, any variety, three premiums.....	$6 00	4 00	2 00
No. 6.	For Specimen Plant, of any variety, four premiums...	$4 00	3 00	2 00	1 00
No. 7.	Cut Blooms of Japanese and Chinese varieties. For the best twelve specimen blooms shown in bottles, three premiums.....	$3 00	2 00	1 00

Voluntary contributions of Baskets and Bouquets of Flowers, are respectfully solicited.

This Exhibition will be open to the public, without charge, from 3 o'clock, P. M., until 5 o'clock, P. M., and from 7 o'clock, P. M., until 9.30 o'clock, P. M.

N. B. All articles, intended for this Special Exhibition, must be in the Hall, and ready for inspection by the Judge, by One (1) o'clock, P. M., precisely, of the day of the Exhibition.

By authority of the

COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS.

Attest:

EDWARD WINSLOW LINCOLN,

Secretary.

OFFICERS AND COMMITTEES

OF THE

WORCESTER COUNTY HORTICULTURAL SOCIETY,

FOR THE YEAR 1884-5.

PRESIDENT:

FRANCIS H. DEWEY, of Worcester.

VICE-PRESIDENTS:

STEPHEN SALISBURY, of Worcester; HENRY L. PARKER of Worcester; GEORGE E. FRANCIS, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

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James F. Allen,	Worcester.	J. Henry Hill,	"
Henry Woodward,	"	James Draper,	"
William T. Merrifield,	"	F. M. Marble,	"
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H. M. Quimby,	"	Calvin L. Hartshorn,	"
Samuel Flagg,	"	Joseph Lovell,	"
Horatio Phelps,	"	Frederic G. Stiles,	"
Frank J. Kinney,	"	Edwin Morse,	"
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George Calvin Rice,	"	Mrs. John H. Coes,	"
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William Eames,	"	Mrs. Adin A. Hixon,	"
Sylvanus Sears,	"	Mrs. Thomas Ward,	"
Henry Phelps,	"		

STANDING COMMITTEES.

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Edward W. Lincoln, 1885. Nathaniel Paine, 1886. George E. Francis, 1887.

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Edward W. Lincoln. Charles E. Brooks. George E. Francis.

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James F. Allen, George E. Francis, Hermann F. A. Lange, O. B. Hadwen, James Draper.

ON ARRANGEMENTS AND EXHIBITIONS:

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JUDGES.

ON FLOWERS, PLANTS, ETC.

Hermann F. A. Lange.

ON FRUITS, ETC.

James Draper.

ON VEGETABLES, ETC.

Charles Greenwood.

TRANSACTIONS

OF THE

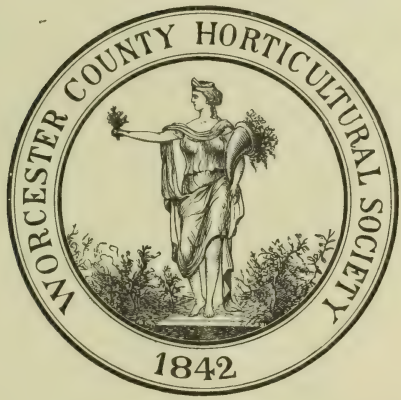
WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR 1885,

WITH THE

ROLL OF MEMBERS.



Worcester, Mass.
CHARLES HAMILTON, PRINTER,
311 MAIN STREET.
1886.

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WORCESTER COUNTY
HORTICULTURAL SOCIETY.
A. D. 1885.

ANNUAL REPORT OF THE SECRETARY.

To the Members of the
Worcester County Horticultural Society.

THE property of the Society, thanks mainly to the assiduous care of the Janitor, has been maintained in excellent condition. His Report, as Librarian, will state the increase of volumes and the use of new or old,—which is not what it should be or could be wished. Were it likely to produce the least good effect, just complaint might be made of that indifference, or neglect, which deprives us of the numerous publications, by the Federal Government, descriptive of the vegetation and botany of the far Western plains and trans-montane States. But we have managed to exist, hitherto, without pap or protection; and can continue to pay taxes for the support of other institutions or societies, whose deserts appear to be measured by their importunity or uselessness. Our Library has far outgrown its limited space, and new cases with shelving will be imperatively required in the immediate future.

The front doors and main approach to our Hall had become worn out, and were so shabby in appearance that it was made a constant theme for reproach by Members from out of town. The door-step and threshold encroached upon the Street, and it was only a question of time when their removal would be required by the City. Under these circumstances, it was determined by the Finance Committee that a complete renovation was

demanded, not alone in your own permanent interest, but by a proper regard for the appearance which a Society like this should always seek to present before the public. The work has been completed and may safely challenge criticism, as it has already compelled approval. All the necessary expenditures have been defrayed from ordinary revenue; although it has not left any sum applicable to the reduction of our debt. That, however, has been brought within such very moderate bounds, that its complete extinction cannot be long delayed. Some indispensable repairs to the passage-way, in the rear of our Hall, will finish the work deemed absolutely essential by the Finance Committee.

Our Exhibitions, until last Spring, have usually commenced with a display of Azalea Indica,—at about the period of the Vernal Equinox. And, in three cases out of four, it has chanced even then that the plants brought out were exposed to a temperature so severe as to be fatal, without greater safeguards than most growers have time to apply. Last Spring, for the first time, it was attempted to hold fortnightly Exhibitions, beginning with the first Thursday of February, being the first day of the month. Upon that date, the Hyacinth and Primula Sinensis were called for. The record made at the time, bluntly says: "Hyacinth,—no entry worthy of mention." Of Primula,—there was no entry at all. Among Apples,—the Fameuse and Tompkins Co. King, were invited, but, in the phrase of a Worcester belle of old, asked to a Cattle-Show Ball,—"*re*-clined the inv*en*tation." Two weeks later,—on the 19th of February, your Schedule called for Cineraria and Cyclamen,—each in bloom. On that day—at 11 o'clock, A. M., "the mercury indicated but +16°." The contemporary minute is: "A fair display of Cineraria, but the cold too severe to justify exposure of choice plants. Such was notably the case with the State Lunatic Hospital. No Cyclamens to speak of: either they are not,—or it is too early." Of Apples,—it was observed,—that there was,—One (1) plate of No. 15 (Golden Russet of Mass^{tts}), and 1 (one) plate of No. 17 (Leicester Sweet), No. 18 (Northern Spy), in profusion, but of quality far inferior to its kind in Autumn." "Pears were discreditable."

Later,—under date of March 5, the criticism is;—"Nos. 26 and 27: Azalea Indica—in bloom:— No entries." Cold and raw day, the call proving wholly premature. Even in Boston, where it is usually two weeks earlier than in Worcester,—Azalea Indica is not invited until the 19th. Of Apples, under the head of "No. 28, Baldwin,"—there was a large display, but in quality the specimens were plainly inferior to what were shown in Autumn. Of Yellow Belleflower, there were but two plates,—of Cogswell, one. The display of R. I. Greenings was much better in the preceding Autumn. Of Pears,—it is remarked;—"Nothing shown but Duchesse de Bourdeaux, which is fit only for cooking, and for that purpose is not superior, if equal, to other varieties heretofore known." And such is the record, continuously. Throughout March there was an extreme and almost unbroken cold spell. On the 18th, the mercury, in exposed places, indicated—6° at sunrise! On the 19th, when we have usually invited Azalea Indica but, in this instance, preferred the Arum (Richardia) it was—"milder in the morning, but cooling towards night, and only 10°+ on A. M. of 20th."

Now what does all this prove? Object lessons were intended; and, in most instances, the pupils were present. But, if examples were lacking, how could the lessons be conveyed? There is no doubt, if we elect to occupy that province, that we can force the season. Our florists have shown in Boston, triumphantly, that which, with greater difficulty, established its supremacy in Worcester. Yet this is not a florist's Society. At the risk of misapprehension, your Secretary cannot too often, nor too emphatically, declare that were its prizes to become the exclusive spoil of professional effort,—it were better that this Society had never existed. Florists can take care of themselves: it is their business, from which their livelihood is derived. But Horticulture is broader than the mere production of flowers, for sale, almost in the proportion that the thousands of door-yards and gardens bear to the tens of commercial green-houses. The Florist would sell the Astilbe Japonica when flowers are craved in winter. What cares he if its nature is to bloom luxuriantly in the sunny days of June? He coerces Deutzia Gracilis into exhaustive floriage,—indifferent or heedless if every condition of

its existence is warped. His business is to sell and get gain. And that, in getting so much of the world, he has not utterly forfeited his own soul, may be accounted as greatly to the credit of his occupation. Yet the Worcester County Horticultural Society was founded by Amateurs, has been sustained by them, is in a sound financial position through their bounty, and must depend upon them for its healthy, permanent support. The taste of the amateur is natural, if untutored. What he does not know, he may learn. The professional florist is too apt to be possessed of the devil that goes up and down in the modern Athens! His foible, too, is omniscience. The amateur does not insist that his Rose shall have been formed upon the turning-lathe,—his Aster shaped in a matrix! An imperfection, here and there, insignificant at worst, simply makes it of the earth—earthy. And there is where it belongs. Have patience, and wait for your Blue Roses, until you are transplanted to the New Jerusalem!

Let there be no misunderstanding! The contention is not that the co-operation of the professional florist should be repelled; for, in the opinion of the writer, it should not only be invited but cordially welcomed. But the suggestion intended is, that his habit is too artificial to govern in the formation of a schedule, however valuable may be his advice and aid. Ordinarily,—he will slight the popular preference, if he does not treat it with outspoken contempt. And yet the Society or individual, that can popularize a love for flowers which can be grown by all, will have achieved more for the ultimate welfare of professional floriculture, than if they were to develop inexhaustible sources of latent heat or mines of native* glass! And, of this class are notably Annuals and Bi-ennials,—with the line of division between them sometimes almost imperceptible. Of later years, somewhat has been done for their encouragement, by our offered premiums: yet but a trifle compared with what was possible. The Scabiosa got a foot-hold in our schedule, thanks to John Milton Earle! But where are the Eschscholtzia,

* This was almost written native Brass! But the writer remembered, in time, that such mines exist, and can be found (if only) in Maine! to put trust in Morse's Geography. E. W. L.

and the Dwarf Rocket Larkspur? Nay,—why cannot we help in the diffusion of botanical knowledge among our school-children by extending pecuniary inducements for the collection and display of distinct species of Wild-Flowers—through the season,—say the best ten or twenty bottles,—from Epigæa repens, along through Solomon's Seal, to Lobelia Cardinalis, or even Solidago in its almost countless variety? A hodge-podge of Wild Flowers, hitherto, has proved a delusion and snare. But the seasonable display of superior specimens of any conspicuous species, should prove instructive and of interest. For, is it not Revelation, that ye shall consider the lilies of the field!

Would it not be better,—until the expansion of the City has absorbed and swallowed up what are now its rural districts,—so to regulate our Schedule that it shall provide for the mass of the community, and be in the highest sense, popular? Is there a florist of them all who can tame the Fringed Gentian?

The verses of the greatest poet of all time were recited at Fairs and Festivals, and the approval of ancient Greece has been confirmed by the consent of successive ages. The marvellous plays of Shakspeare are read and gotten by heart, at the rural fireside, where wit and homely wisdom are made to clash, vivify, and find appreciative audience, as of old at Stratford. Modern conceit,—whether embodied in the one idea of the professing philanthropist,—the saponaceous hypocrisy of the contemporary Pharisee; the deceptive platform of the politician, in,—and who would not be out,—of office; is alike false-hearted and supercilious;—contemptuous of that plain people, whose instincts are unerring; whose approbation is seldom withheld, when merited; and whose judgments are fatal, because never finally awarded until longer mercy would be a crime.

This Worcester County Horticultural Society was incorporated for the explicit "purpose of advancing the Science, and encouraging and improving the Practice of Horticulture." In so far as those objects may be attained, by the visible display of Flowers, Fruits, or Vegetables, the Society has a just right, in political phrase, to "point with pride" to what it has accomplished. Those who are with us, but not of us, may sneer at

our claims and affect to depreciate or deny our merit in the premises. They forget—more likely never knew—what Worcester Town, or County, was, of old; how few were the skilled Pomologists; how limited was the number of varieties of Apples, in common enjoyment; how poor and much more restricted was the list of Pears. The Lilac, it is true, was fragrant in every door-yard, supplying a homely genuine beauty that still retains its charm. But that wealth of floriage,—it might almost be said of foliage, in view of the fashionable variegation; that is visible everywhere in the contracted court, upon the wider lawn, or throughout costly and extended pleasure-grounds;—was apparent nowhere, because it nowhere had existence. For now Forty-Three Years has this Society been Preacher of the new dispensation,—if not of "sweetness and light," at least of beauty and good taste. Go where you will,—look as you choose!—and you cannot miss seeing all around you, the plenteous evidence that its seed has not been sown on stony ground. Some fell among thorns, it is true; but our sturdy founders uprooted or mowed them down. So that now we behold, in every direction (and as we behold, derive enjoyment), Flower-Garden, and Orchard, and latest, perhaps best of all,—Vineyard,—in which emulation takes precedence of contentment: in which none are idly satisfied with what is, so long as there is better to be attained; wherein the best is sought and, as competitive trials have proved, often achieved. For all, or the greater part of this,—it is no exaggeration for those in whose life-time it has occurred, to ascribe unstinted credit to the ceaseless effort, advice, and encouragement extended by the Worcester County Horticultural Society.

But yet,—have we done all that we could? So long as aught remains to be accomplished, shall we consider our work complete? Is it the chief end of the Horticultural man, or woman, to produce and exhibit an apple or pear that may weigh, this year, a quarter-ounce more than a similar specimen did, in 1884? Because, by parity of reasoning, should it weigh less, you must admit a failure. Does the florist,—he or she,—analyze the Marigold, or Rose, to determine the potency of its perfume! And whether it has gained, or lost, as the seasons succeed each

other? As before stated,—it is not denied that Exhibitions have their value; but,—do they comprise the whole duty of the Horticultural man? Are they the oniy means of "advancing the Science, and encouraging and improving the practice of Horticulture?" The writer has beheld with admiration (with some mortification,—shall it not be confessed?) the persistent efforts of the Worcester Natural History Society to develop and foster the study of Botany. Without endowment;—over all obstacles;—worse still, against indifference;—it has persevered, until zeal has succeeded inertia and large classes devote themselves to the pursuit, mastering at least the rudiments of the science. Was not,—is not,—that our appropriate work? Was not,—is not,—that, or something very like it, the obligation that our founders assumed, when they solicited and obtained a charter? Was it not for such an expressly declared purpose that they were authorized to hold real and personal estate and clothed with certain specified powers and privileges? "To advance the Science and encourage and improve the Practice of Horticulture!" Surely, the motive and duty are sufficiently exalted to fulfil any ambition. Should not this Society awake to the complete measure of its opportunities; and not alone by its accumulation of Books (too little read!) not alone by its distribution of prizes, of value doubtless, but soon expended; but, by every other means in its power, bend its energies so as more thoroughly to accomplish its mission!

Much is heard, in our day, of the future University;—the congeries of schools wherein all learning shall be summed up and delivered to throngs of attentive and rapt students. Might we not secure it, easily and speedily, here in Worcester, were we to open our eyes and be true to ourselves? In dreams of the writer, the Mechanic Arts have found a generous patron in the Association that now assumes the title; but refuses the duties and abnegates the functions that should accompany it. Where it should be the complement of the Technical Institute, it is content to collect its rents, or to distribute among its members their allotted share of tickets to song or dance. Another dream has beheld the Farm of the Agricultural Society,—a farm and not a track for stale geldings, with hide-bound legs and armored hoofs!

An experimental farm, large enough for the modern Exhibition, and good enough to grow something fit to exhibit! Just reflect upon what might be achieved, were the Mechanics Association, the Agricultural Society, and our own Horticultural Society, to apply their every energy and resource to the promotion of their declared objects! Students, from far and near, should throng their courts, hungry and athirst for their multiform instruction; in some of whom might be awakened that divine spark of genius once latent in a Blanchard, a Howe, or Whitney. What they achieved against obstacles, and in spite of disadvantages,—*because it was in them!* would assuredly not be repressed in development, were circumstances to be rendered more propitious. Does not the prospect allure? Who would have dared to predict, a decade since, that Worcester would so soon become a famous musical centre? And yet it has been her own sons who have made her such. Is the aim, above indicated, of even half as difficult attainment? Let the people of Worcester decide, for, after all, the ultimate determination must rest with them.

"Ye cannot serve God and Mammon!"

Are you sceptical upon this point, and does the gospel of Evolution transcend that which was once delivered to the Horticultural saints? There are exhibits to which premiums are awarded, and there are other some that obtain no official recognition. There are flowers and fruits that find place in a Schedule, because of a belief (mistake though it may chance), that they ought to be encouraged; and there are others that were never mentioned, or for divers and sundry reasons have been suffered to lapse. Well,—wherein is the wrong? Or,—who is harmed? Somebody fails to get a money prize, or possibly the opportunity to compete for one! Has the milk in the horticultural cocoa-nut no greater percentage of solids than that? Does it not matter, although some seed may have fallen in stony places and other some been choked by thorns, that the harvest has been a fair average, with perhaps a remnant for the gleaners? What would they have—the children of Unreason and Greed? A society exists—

"to advance the Science and encourage and improve the Practice of Horticulture."

Does the award and distribution of money prizes promote that end? They are awarded and distributed. Is that the sole way of horticultural salvation? The entire and exclusive ambition of the horticultural man or woman? What then becomes of those who, like your Secretary, find superior specimens of *Winter Nelis* decided to be not even fifth-rate? Shall they curse the judge and go out to the highway, instigating the lame and blind to a cabal for his removal? Or shall they rejoice and be exceeding glad that they have lived to see *Josephine de Malines* attain such amazing development, finding ample satisfaction for their own inferiority in the fact that "Sparta has begotten worthier sons!" When it comes to getting an exclusive run of the trough, the titman will win every time. Faugh!

"My offence is rank, it smells to heaven."

When we pronounce a tree, shrub, or plant, hardy—what do we intend by the expression? Or, do we not, too often, use it without reflection upon its full force and significance? Some years since, a lady, writing about *Hyacinthus Candicans*, in the *Gardener's Monthly*, says that "Mr. Hovey calls this bulb hardy with the protection of a cold frame, but is better taken up and planted in the Spring, like the Gladiolus. Perhaps that is the better way to treat them; but the bulb is as hardy as a Tulip nevertheless." She goes on to describe her luck with "some covered not more than two inches, while one was fully exposed on top of the ground, in March. Every one came up,—that included." In the winter of 1879–80, your Secretary left some roots of *Calla vari-folia* in the ground, through forgetfulness, and to his utter astonishment, found them putting forth in full vigor, the following Spring. He has had a similar experience, for four winters in succession, with bulbs of *Amaryllis longifolium;* although it should be added that they were planted in a place used for the deposit of leaves gathered in the Autumn and which were sometimes heaped up a foot deep. And yet it would be called an abuse of terms, to style any variety of Amaryllis, or even Richardia, but half-hardy. In the English Magazine, *Gardening Illustrated*, Dec. 8, 1883, occurs the following: "The *lancifolium* lilies or, as they are now called,

speciosum, are now among the most handsome of the family to which they belong. The greatest drawback is that they are scarcely hardy enough for out-door culture." And yet who in Worcester County, questions the entire hardiness of Japan Lilies in their almost infinite variety! For years thousands of bulbs of *Lilium Speciosum* have summered and wintered in our municipal ELM PARK, the cold during the last three winters being of extreme intensity. But still, in the summer of 1885, their vigor was more marked and their brilliancy more striking than at any former period.

Years ago,—those world-famous Horticulturists, Ellwanger and Barry, questioned the entire hardiness of *Cydonia Japonica*. In this immediate locality it has withstood a temperature of—27°, unharmed; and even in Rochester, distrust seems to be now dispelled. Yet, in Bulletin No. 7, just issued by the Department of Horticulture and Landscape Gardening attached to the Agricultural College of Michigan, it is broadly asserted, under date of Oct. 1, 1885, that "the Japanese Quince is not hardy!"

The *Villa Gardener* (Eng.) writing of *Lobelia Cardinalis*, makes the following curious statement:—"This herbaceous perennial" (Charles M. Hovey insists that it is a bi-ennial—and the experience of the writer coincides), "merely wants the protection of a cold frame, and should be sown in the autumn and kept in the house. The plants will appear in the following spring, when they should be planted into separate pots, shifting once or twice during the summer, and protected during the winter."

The climate of England is reputed to be comparatively mild. What our own winters are you need not to be told. Still, Lobelia Cardinalis is said to require the shelter of a "cold frame," in the one country; while here, in bleak New England, it riots in rich profusion, reckless of storm or sleet, and apparently indifferent should the mercury burst the bulb of its thermometer.

What then is it to be hardy? Upon what does it depend? In what respect, or to what degree, is it contingent upon uniformity of temperature, excess or deficiency of cold, fierce winds or gentle zephyrs? What forces of Nature,—restrained

or unchecked, are they that insure or permit success in the cultivation of shrubs, plants, or trees? The Winter of 1884–5, in and about Worcester, was of almost unprecedented severity. And yet the writer, who has official occasion to watch the growth of a very great diversity of vegetation, can recall no season wherein the losses were less or the damage so inappreciable. Neither was there a great fall of snow to protect the ground. What, then, is hardiness? And why?

The Grape! does it grow more hardy, with age? The present season is recorded as below the average, in temperature; but yet the varieties of that delicious fruit displayed upon our tables throughout the Autumn, A. D. 1885, are rarely surpassed for maturity or flavor. The vines of your Secretary which, as you were before informed, have been purposely encouraged to straggle at will over the choicest Pear-trees, each and all gratified the palate and appeased the stomach. At this time of writing*, a recent hard frost has left them unharmed. Delaware, or Barry, Lindley, or Brighton; more particularly that thick-skinned Diana, put forth their tendrils, cling to whatever they can catch, vibrate with every passing breeze, and furnish—ripe Grapes! Is not that what you want! If it be urged in objection to such practice, that the vine will, sooner or later, prove fatal to the tree,—the reply is apt and sufficient, that the fittest will survive. Your Secretary may be peculiar in his preference: but he will choose the grape rather than the pear, every time that he must make election. Yet the sacrifice is not imperative with those who possess land enough. They can plant other trees to support the vine—the maple notably, with its wide, spreading top, its sturdy trunk, and its usual healthy habit—perhaps also the *Catalpa speciosa*, of wonderfully rapid growth. What is to be secured, is the almost incessant vibration that appears to be essential to the thriftiness of deciduous trees; and which, by its continual motion, compels the vine to reach out its tendrils, keeps the air in constant circulation, and prevents or postpones that stagnation of the atmosphere which

* 8th October.

results in, if it does not actually produce, mildew or frost. For, as to the mystery of existence—vegetable or other—who shall say that movement is not very life?

Within how few years has the out-door Grape attained its position? It seems but yesterday that the Concord,—the pioneer in modern American Viticulture,—was introduced. Now, we are perplexed by the multitude of candidates for popular favor—whose name may well be legion and whose advocates too often appear possessed. Which varieties, or howsoever many, shall finally achieve unchallenged preëminence,—one thing is definitively settled: The Grape can be grown and perfectly matured, in Worcester County, in any reasonable exposure, out-doors, four years out of five.

But, every year, we are confronted,—would that I could say—affronted,—by some new Raspberry that has approved itself hardy! Usually it is *Rubus Occidentalis*,—a Thimble-berry, or black-cap; grown by those who know of nothing better; or who, if well informed,

"Still the worse pursue."

Your Secretary must have wearied you by his constant iteration of the truth that no variety of *Rubus Idæus* can endure a New England winter, unprotected. But the warning falls upon heedless ears; and the inexperienced grower yields himself a willing dupe to glib assurances that in this, or that, newer miracle, scepticism will be confounded.

A plant, or shrub, may survive a single winter, or more trying spring, apparently unharmed, if circumstances are exceptional. But the need of resistance to intense cold, or to piercing winds, involves a fearful draft upon its vitality,—an exaction whereto it will surely succumb sooner or later. When vegetation of any kind is hardy it can be so demonstrated. But let all who would possess themselves of a new fruit bear in mind that cheek is ample; assurance brazen; greed omnipresent and unscrupulous; and that it will be vastly cheaper to allow the hardiness, so confidently asserted, to be proved by Time, before incurring expense or suffering disappointment. Though trite it cannot be repeated too often: patient waiters will not be losers!

"Why did you bring down those hard things?" "I should think Lincoln would know better than to send them!" Such was the greeting accorded to one of your Members who, upon the 29th of August, ult., offered to the Massachusetts Horticultural Society a dozen of the *Assomption* Pear. The salutation was scarcely cordial even if veiled beneath a very latent courtesy. The Massachusetts Society invites exhibits from abroad—not restricting its solicitations to its especial Membership. The Pears in question were sent in good faith. They had taken the first Premium at our own Exhibition; and, as unusually good specimens of a comparatively new variety, it was thought might be welcomed elsewhere. The mistake was quite natural; and therein must be found the apology of the writer, who aimed to be the exhibitor and by whom, most assuredly, the error will never be repeated.

But should fruit be dead-ripe when exhibited, or simply mature? The law that governs, in Tremont Street, will not answer for the guidance of Worcester County. The Baldwin Apple is hard for months after it is fit to be picked from the tree: a circumstance alike fortunate for those who would have it in Winter, as for that large company of Orchardists who are looking to it as a profitable article of export. The Northern Spy and the Roxbury Russet would never be exhibited in the year of their growth were it exacted that they should be mellow to the touch. The chief merit of the Hubbard Squash,—among vegetables,—is its quality of late keeping. What Pear that is worth mention could be shown—hitherto—except of half-size and impenetrable even to the knife! Is it the Comice, Anjou, or Winter Nelis? Each of those leading varieties is gaining daily in bulk, color and flavor. They might be arrayed in the awkward squad of Pomology, as they were on Tremont Street, September 15th, ult., but they would be merely the result of conscription; and like all the products of a draft, thoroughly worthless for their legitimate purpose.

It may suit the peculiar eclecticism of the metropolis to gloat fondly over the fleeting charms of a Boussoc or Flemish Beauty. But, in these rustic and benighted regions, fruit is prized for its excellence of flavor and somewhat also for its keeping qualities.

There are varieties that cannot be gathered early enough or eaten soon enough, or too summarily discarded. At how many Exhibitions—in those queer old collections of everything that could be raked and scraped together;—worthless agglomerations happily banished from these Halls! have you beheld that which was seemingly fair and sound, upon introduction, turn into a mass of decay and rot before night!

> "The morn beheld their proud array;
> But, when the sun set, where were they?"

Fruit should be exhibited when it has attained maturity. Its ripening is an entirely different matter. Its quality, of course, can only be tested after it has become ripe; and for that purpose a committee that merits the name should reserve a sample.

Moreover, gentlemen who are disposed to be hypercritical should be consistent, and let their practice and precepts conform. If they object to a display of the *Assomption*, because the specimens are not mellow to the touch! assuredly it does not become them, but two weeks later, to accept the lowest prizes for Anjou and Winter Nelis! The season around Boston must have been at least sub-tropical, which could force those varieties into eating condition by the 15th of September. We do not wish to see them upon our tables until the very last of October. And even then we rejoice that they will not be fit to eat for weeks, if only they can be gathered of full size and complete symmetry.

Curiously enough, the judgment of your Secretary has been confirmed by *The Gardener's Chronicle* (Eng.) which, through its Boston correspondence, under date of August 29, records that "on the fruit table were some fine specimens of the new Assomption Pear."

The Twentieth (20th) Session of the American Pomological Society was held in the City of Grand Rapids, Michigan, during the early days of September. Credentials were issued to *Vice-President*, Henry L. Parker who, at much personal inconvenience, consented to represent you. It is greatly to be regretted that more of our Members could not accompany him. A

Society, of such established reputation as is this; standing for a County that yields precedence to none in the just fame of its Pomology; should not suffer laws to be passed upon matters of vital moment to its best interests, without closest watch and ward. Your Secretary has heretofore expressed decided opinions upon this subject, and they are reinforced upon each recurrence of the occasion. He would repeat the views of yore in their original form, and with added emphasis:—

"Our delegation was small in number, if not restricted as to physical size.* '*Tempora mutantur!*';—as my '*captatores verborum*' intimate, heretofore suggested in these Reports. It was not a pilgrimage to Boston,—to your next-door neighbor: nor could due representation dovetail with household shopping. But this lack of adequate attendance, liable to become more significant as distance extends, impresses upon me still more forcibly the duty of advising a remedy. Should not this Society recognize it as an inevitable obligation to be represented at each recurring Session of the American Pomological Society? Should it not take all proper means to ensure that its representation shall be effective? It cannot always command the gratuitous service of members who will defray their own expenses. It has no reason to expect such service to be volunteered; and it should have too high a regard for Horticulture,—whether as a Science or Practice,—to be willing to accept such proffer if tendered. That we should be represented, commends itself as eminently fit. That we should be represented by competent men, is, of course, your unanimous judgment. That the common treasure should support the common burden, must be admitted by you, upon reflection,—needing no argument. And, therefore, I do not hesitate to advise that the travelling expenses of our delegate to Philadelphia, A. D. 1883, be reimbursed; and that this Society adopt a settled policy of representation, within sharply defined limits, at all future meetings of Societies of cognate pursuits."

The American Pomological Society adjourned to meet in Boston A. D. 1887. This was done at the request of its venerable President, who desired, should his life be spared, to gather the delegates once more around him and to give them his final welcome ("absit omen!") to the familiar scenes of his home. But, although this appointment comes very close to your own Fiftieth (50th) Anniversary, your Secretary cannot believe that you will permit it to serve as an excuse for a denial of your claim to a Session of the American Pomological Society, here in Worcester, A. D. 1892. That occasion will be exceptional, of

* The delegation—a unit,—has not yet been coaxed upon the hay-scales.
E. W. L.

itself, and should be of interest to all Pomologists in the Republic. A time-honored Society that exists in exuberant force and vigor; that possesses a priceless Library, and a Hall then freed from debt; that counts its life-membership by hundreds, comprising, living or dead, a large proportion of all that has given Worcester its eminence, throughout what are now the United States, for science, learning, or enterprise; can neither be ignored nor neglected. Doubtless there would be no such disposition; as there could be no sufficient motive for it. But importunity is not always discriminating; and localities, in their impatient struggle for recognition, are not over-careful if they sometimes jostle merit aside.

This subject is again commended to your attention that you may reflect upon it in all its bearings and be better prepared for timely action. The Sessions of the American Pomological Society occur in the odd-numbered years. As the next is already assigned for A. D. 1887, in Boston; its successor will be due in 1889. A. D. 1892 will be the date of our Fiftieth Anniversary. It is submitted for your consideration, whether it may not be wise to tender, through our delegates to Boston, an invitation for the American Pomological Society to hold its Twenty-Third (23d) session in this City. That body could then decide if it would prefer to skip one year, in its sequence, omitting its regular meeting in 1891, for the sake of gratifying our wishes and doing honor to our local Pomology!

Our Society will doubtless learn, from its delegate, what impressions were produced upon his mind by the interchange of opinion at Grand Rapids. The proceedings, as reported in the contemporary press, appear to be colored by an interest somewhat remote from our own. The comparisons and discussions were mainly confined to the Smaller Fruits, so called; and, in their progress, was rendered yet more glaring a deficiency to which your attention has been often invited in these Reports. Outside of New England there would seem to be scarcely any knowledge of the *Raspberry*, in its superior development. The little tier of Counties bordering upon the Hudson River can scarcely be counted an exception to this rule; for, even in them, varieties that always flourished heretofore have, latterly,

almost entirely died out of cultivation. The Thimble-berry was the theme for comment and commendation, with here and there half-suppressed mention of the Cuthbert. Of course, the actual exhibition of fruit must be governed largely by the locality wherein it is held; and Raspberries of any kind are not commonly gathered in September. But an assembly of delegates, collected from all parts of the Republic, should broaden—not narrow—the sphere of our intelligence. An American society should advance its standard, as well for the Small Fruits as for the Apple and Pear. Nor should it lend too willing audience to the commercial spirit:—a too facile concession to which will inevitably degrade and destroy the very organization. If symptoms of any such tendency have been detected, in the proceedings at Grand Rapids, or at former sessions, they are mentioned with regret and that the voice of disinterested warning may be heard and heeded in time. What can we sell? must needs constitute an unsound platform for a Pomological Society that would be worthy of the Republic. Rather—what does our collective experience demonstrate—ought to be grown! It might well be that God looked upon the Triomphe de Gand, and Brincklé's Orange; upon the Comice, and Northern Spy; and saw that they were good. But is it credible, even though their evolution was suffered, that the Boussoc, the Datura, and Marigold, alike filled His gaze and were comprised within the same benediction!

Will it sell? What a question to be propounded by the sincere Horticulturist. Is there not a market for Asafœtida? If you elect to make Cheese, see that it be a first-class article. But must you therefore insist that the "market" requires only Limburger!

Not more than a dozen infallible causes and cures of Pear-Blight have been discovered during the past year, and proclaimed through the newspapers. Its undoubted origin is announced with oracular assurance; and, as of old, those who sacrifice at Delphi or Dodona greedily accept the revelation,—however improbable or obscure. The latest,—which derives weight from its source—the New York Agricultural Experiment

Station,—differs from the common experience in this section of the country in that it asserts:

"All varieties of the Pear in the orchard were attacked, but the Bartlett seemed more susceptible to a rapid progress of the disease than any other."

Hereabouts,—in the City of Worcester and vicinity, the Belle Lucrative and Glout Morçeau suffered worst; until of late years, when Clapp's Favorite has surpassed them in this evil respect and rapidly attained to a sad preëminence. The Bartlett, while not exempt from attack, has remained comparatively unharmed; still bearing, as when first introduced, its excessive crop of what might well be termed the Universal Pear! In the garden of the present writer, the Bosc, Seckel, and Winter Nelis, were never injured, scarce assailed even; nor the Comice, until the past summer when some twigs were partially affected. Yet those trees grew among Raspberries which exact heavy fertilization. It is due to the well-earned reputation of that Experiment Station, to quote its own language:

"Last year the infectious nature of the disease was established by a large number of artificial inoculations, made under circumstances which admitted of no doubt of the result. This year the disease has shown itself over one-third of the orchard and attacked trees in the adjoining grounds, nursery stock and hawthorn hedges.

The observations and experiments have proved that the disease enters the branches through the tender shoots at the ends or through the flowers, thereafter progressing steadily downward toward the trunk. In one instance it entered the trunk through a young shoot and destroyed the entire tree. All varieties of the pear in the orchard were attacked, but the Bartlett seemed more susceptible to a rapid progress of the disease than any other. In addition to the out-door observations a series of in-door experiments proved that the germs will live and grow in a sterilized infusion of corn meal, hay, barnyard manure, green fruit and starch. The important point established is that they will thrive outside the tree in dead organic substances. The final conclusions reached are:—

The disease is due to living germs. These germs can live and multiply indefinitely in any damp spot where there is decomposing vegetable matter. From such places they are raised into the air when dry, or carried up by moisture. From the air they lodge upon the trees, and when the conditions are favorable, pass into the tissues and cause the blight. The conditions referred to are in general (1) very tender tissues, such as are found within the flowers and at the ends of expanding shoots in spring, and (2) a moist atmosphere. No varieties

are entirely blight proof, but the disease* spreads so slowly in some that they receive little injury, especially when not making too rapid growth. The reason why the blight when seen in July and later, does not pass directly from one limb to another, or from one tree to another, is because in the first place the germs can not escape, being confined by the bark, or else escape in a viscid exudation which holds them firmly together, and in the second place there are very few places on the tree at this time of year where the surface tissues are sufficiently tender for them to find an entrance.

This suggests thoughts regarding preventives and remedies. Do not force the trees into too rapid growth by heavy fertilizing or otherwise. Place no confidence in sulphur, lime, or washes and application of any sort. Promptly remove every trace of the disease a foot or more below the lowest spot where it shows, and burn the branches."

The question arises—wherefore those "living germs" (bacteria)? What has caused their development, in these recent years, that did not induce to a similar formation and malignant activity before? Most plagues that have devastated the human race are greatly mitigated; so that their re-appearance is scarcely dreaded. Why, then, this vegetable blight, omnipresent, that gives no premonition, but is alike swift and fatal! Amputation, or excision, advised as the sole remedy, has long been tried; now and then with good results; oftener, as it seemed, with the effect of accelerating and increasing the injury already done. While we should ever be ready to accord a glad welcome to Science, let us insist also that she hold herself prepared to demonstrate beyond even cavil, the absolute truth of her claims. The establishment of a Horticultural or Pomological Experiment Station, within this great fruit-growing County of Worcester, has been suggested in these Reports. Is it not likely that it might find a broad enough field for investigation? Why should not the considerable sums now worse than wasted, in the form of monetary bounties to Agricultural Societies, be applied and utilized in some such way? Those Societies now enjoy entire immunity from taxation. Should not that suffice for aught but an insatiate craving?

By the death of *Dr.* William Workman, this Society has lost a life-long and consistent friend. His name is conspicuous upon

* High authorities, notably *Prof.* Meehan, doubt that the N. Y. Station is familiar with the dreaded and genuine Fire Blight. E. W. L.

our Roll among our earliest associates, in alphabetical order next after Daniel Waldo and Ichabod Washburn; and from that date, until increasing age admonished his retirement, he could ever be depended upon at our councils or Committees. He was *Vice-President* from A. D. 1844, to 1853, and again for the year 1857, in that whole time, according to the record, being remarkable for punctual and assiduous attendance. Thereafter, he was continued upon your Board of TRUSTEES so long as he was willing or could be induced to serve; and in that, as in every other function to which he could be persuaded, through life, his judgment was always conscientious and sound. The writer remembers that, long after Dr. Workman had been settled in Worcester, it used to be said of him that he was too modest to be successful. Fault,—or Virtue,—it signally characterized our late friend. He lived to behold his chosen profession comparatively freed from it; and to find it, in smooth, unblushing cheek, as it were accepting a new *religio medici.*

Dr. Workman was a rare adviser and, among our Trustees as elsewhere, was rarely thrown off his balance. At that time* when it was realized (it has been more than suspected since!) that two simultaneous Exhibitions of Horticultural products were one too many; he was Chairman of your Committee† to consider and decide what might be done to avert a clash. The conclusions submitted by him, from the Committee, as their "unanimous Report," were so decisive in the premises; so commended themselves to contemporary approval; and withal are rendered so pertinent at the present time by a renewal of the effort to serve two masters! that its reproduction suggests itself, as well *in memoriam*, as that it now becomes a monition from the grave:

"At the Annual Meeting of the Worcester County Horticultural Society, holden in January last, a Committee was appointed to meet a Committee of the Agricultural Society for the purpose of considering a proposition made by that Society, for a Union Exhibition of the two Societies, and said Committee were instructed to report to the Trustees of our Society.

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* A. D. 1861.

† The Committee consisted of William Workman, O. B. Hadwen and George Jaques.

Your Committee have attended to the duty assigned, and submit the following as their Report:

The Committee of the Agricultural Society stated that the interest in the show of Fruits and Vegetables had very much declined in their Society since the organization of our Society, and for the purpose of reviving that interest and of rendering their shows more attractive, they invited us to unite our exhibitions with theirs, to hold them at their Hall and under their auspices.

They manifested their purpose, if we should decline the proposed union, to offer generous premiums for the exhibition of Fruits, Flowers and Vegetables, and intimated their fears that such competition might be injurious to the welfare of our Society.

We freely and frankly conceded to them a perfect right to offer any encouragement to increase the interest of their shows which their wisdom might dictate, and at the same time expressed our conviction that no injury would result to our Society from the threatened competition; but, on the contrary, we were persuaded that it would operate rather as a salutary stimulus to our members to make greater exertions to improve the excellence of our own shows. Why should we fear the competition?

The Agricultural Society had the whole field to themselves for twenty or more years before the existence of the Horticultural Society, and what results have they to show for their labors so far as the cultivation of Fruits and Flowers was concerned? At the time of the organization of the Horticultural Society, twenty years ago, a small supply of tolerably good Winter Apples might be obtained by applying in season to the farmers. Very few appeared in the streets for sale, and the market was as bare of the finer kinds of Summer and Fall Apples as the ground is of snow in June. Not a peck of Pears could be purchased during the whole season which anybody now would think fit for any animal but the pigs. Mazzard Cherries were offered in the market, and the red Canada Plums were tolerably plenty; but not a cultivated Strawberry, or Raspberry, or Blackberry, or a Grape fit to be eaten could be had for love or money. And as to Peaches, some of us will remember, at the first exhibition of our Society, that some half a dozen plates of the most miserably woolly Frost Peaches were all that Worcester could produce in that line. And, moreover, we were dependent almost entirely upon foreign contributors and wild Flowers for a very passable show in our Floral Department.

What a change you have wrought in the last twenty years, through the efforts of your Society, we need not describe. It is familiar to you all. The superabundance of the most luscious fruits which load our tables and crowd our market, and the profusion of beautiful flowers which ornament our gardens and dwellings, all testify to the success which has crowned your labors. You have done a great, a noble work, not only in supplying the wants but in cultivating and greatly improving the taste of the whole community. We have no reason to fear any competition of our respected and venerable neighbor, the Agricultural Society; we would rather bid them God speed in their

ambition to rouse up the farmers to a higher and better cultivation of the luxurious and ornamental.

Theirs is the farmer's institution, designed specially for this useful and honored class. Let them bring in their Apples and Vegetables, and if they have any of the finer Fruits and Flowers, worthy of a premium, as some of them undoubtedly have, let them exhibit them also and take the awards of their own Society. They fairly and honestly belong to them; and their success need be no disparagement to the progress of our own Society.

We have accomplished much in our line, and without vanity or boasting, may congratulate ourselves and the community on what we have already achieved. But our work is not yet done. There is a vast field for improvement yet open before us; let us not cease from our labors till we have attained higher and more fruitful results.

The continued prosperity and usefulness of our Society must depend, of course, upon the exertions and fidelity of its own members. The honor of taking the premiums of our Society should be esteemed vastly higher than that of taking them from the institution of our neighbors, whose efforts are directed almost exclusively to the coarser productions of the farm, and only secondarily to the finer products of the garden. Common courtesy, ever, as well as profession and prestige, would seem to forbid the professed horticulturist from entering the lists with the farmers, to take from them, as he certainly would, the inducements offered by their Society for improving their orchards and their gardens.

From the above and various other considerations, your Committee are unanimously and decidedly of the opinion that it would not promote the interest or the welfare of our Society to unite our exhibitions with the Agricultural Society at their Hall. We believe it would be repugnant to the feelings and tastes of most of those who have contributed most constantly and freely to our shows, and of those, also, who have graced them by their presence during our seasons of exhibition, to abandon our own beautiful, and commodious, and easily accessible Halls, and transfer our shows to a place wanting in all those facilities and attractions with which we are now so highly favored. It would deprive us of all those social and happy reunions which have been so highly prized, and have never failed to add pleasure to instruction.

We appeal, therefore, to the members of this Society to maintain the high character it has attained, and trust that no inducement, certainly not the offer of a few more pieces of silver, will cause them to withhold their best contributions from our tables at our Autumnal Exhibitions. The Committee propose to the Trustees the adoption of the following resolution:

Resolved, That the Worcester County Horticultural Society continue to hold their Annual Exhibitions, as heretofore, at their own Halls.

WILLIAM WORKMAN, Chairman.

WORCESTER, March 6, 1861."

NOTE: The question arising upon the acceptance of this Report, a discussion ensued as to the general policy of the Society, in which Messrs. D.

Waldo Lincoln, Francis H. Dewey, O. B. Hadwen, Benjamin Butman, Samuel H. Colton, Dr. William Workman, Emory Banister and George Jaques (Chairman), participated. Whereafter it was, upon motion of Francis H. Dewey, Esq., *unanimously*

"*Voted*, That the Worcester County Horticultural Society continue to hold their Annual Exhibitions, as heretofore, at their own Halls."

Could higher praise be ascribed to our late venerable associate than that his advice, given A. D. 1861, approves itself applicable, and equally wise, a full generation later! Like WALDO, and LINCOLN;* CHAMBERLAIN, and SALISBURY; HARRIS, and WHITIN; he had far exceeded the age allotted to man. October 17th, with mental faculties unimpaired, in his Eighty-eighth year, he fell into the sleep that knows no waking.

This Society was ever chary in the bestowal of its distinctions, and the list of our *Honorary* Members is singularly brief. Of those thus placed upon our roll originally, but one or two remain among the living. The most eminent,—the venerable President of the American Pomological Society,—survives in perennial vigor and usefulness. May he long endure! crowned with laurels and saluted by the plaudits due to one whose whole life has been a benefaction!

Whom none knew but to love,
None named, but to praise.

With this solitary exception, not one of those named was more distinguished than that of CHARLES DOWNING. Your Secretary was favored with his friendship; and has—now and then—all too infrequently—laid before you extracts from his inquiring and suggestive letters. It will not be taking up too much of your time to ask your attention to the subjoined affecting and appropriate notice, by Marshall P. Wilder, of his life-long associate in all good Pomological effort:

"Charles Downing was born at Newburg, N. Y., July 9, 1802, and died at his home, in that city, January 18th, 1885. His death is to me a most afflictive event. We were associated together for nearly half a century in efforts to advance the Pomology of our country. Succeeding, as he did, his brother, A. J. Downing, whose eulogy it was my sad duty to pronounce thirty-two years ago, he became the

* Levi.

editor of the 'Fruits, and Fruit Trees of America,' all the editions of which have been dedicated to my name from the first. These circumstances have drawn us more and more closely together by the ties of affection and friendly regard. As a pomologist, he was world-renowned for his knowledge, accuracy, and good judgment, and as such had a longer experience than any other man of whom I have any record in this or any other country. His books will ever be precious memorials of good fruits and good men; of a life whose great object was to make others happy in the enjoyment of the beauties and bounties of creation, and which has been a blessing to our world.

For more than a generation, he edited the 'Fruits and Fruit-Trees of America,' first written by his brother forty years ago. With the progress and expansion of pomology, this work grew under his hand to such an extent that he might well have claimed to be the author; yet, with characteristic modesty, he preferred to lay his laurels upon his brother's grave. This encyclopædic work, in its many successive editions, is now the authority in regard to the multitude of fruits described in it."

Mr. Downing esteemed it an honor to be affiliated with our Society. He took a lively interest in all our proceedings, and was prompt to note any mention of new fruits, or unfamiliar varieties; invariably writing to solicit information concerning them, or to obtain grafts if they could be had true to name. In that particular, he was very exacting; doubtless realizing that at his extreme age, he had no time to waste in cultivating the false or fraudulent. It will be no violation of confidence, in this connection, to insert one or two of his letters, manifesting as they will the interest that he took in our local concerns:

"*Newburg, N. Y., Feb.* 28, '83.

EDWARD W. LINCOLN, ESQ.:

Dear Sir.—

Since the sad accident and sickness my memory has failed me considerably, and I have forgotten whether I acknowledged the receipt of the Transactions of the Worcester County Horticultural Society for 1882; and if not, please accept my cordial thanks for your kindness. I have derived much pleasure and information in the reading of it, and trust the members and others will find it profitable reading and test its value by practice.

I notice, on page 32, the Dawson Apple, which is new to me; and if grafts are to be had, I will thank you to send me 2 or 3 stout, strong, cuttings by mail, for trial here. But if you have none, and know who has, please give me his address. I have the Transactions

of the Worcester County Horticultural Society, from 1852, to 1882, except 1877, 1878, 1879, and 1880, and, if there are any spare numbers of those years, I would be very thankful to receive them.

Very respectfully,

CHAS. DOWNING."

Again:

"*Newburg, N. Y., Jan.* 29, '84.

EDWARD W. LINCOLN, ESQ.:

Dear Sir.—

Please accept my cordial thanks for the Transactions of the Worcester County Horticultural Society for the year 1883. I have been very much interested and instructed in reading the report, and wish all the Pomologists and fruit-growers in the country would read it.

I am pleased with Appendix 'B'—Exempted property. Why should it be exempted when the poor man or woman who owns a small house worth $300 or $500 is taxed the full amount or nearly so! When a rich church goes free, of course the tax has to be made up by the general tax-payers, rich and poor, which adds to their tax and which robs them of their just rights. All kinds of property should be taxed according to its value;—then each would pay their just proportion.

Wishing you good health, a long, useful, and happy life,

I am very truly yours,

CHAS. DOWNING."

"I am still suffering from the injury I received by the cars in New York City, some fifteen months since. My bruised back is still stiff and painful, so much so that I have but little use of it, and can only walk a few rods at a time."

His sufferings are at an end. But the monument which he builded and, by a pious fraud would have consecrated to the memory of his brother, shall endure in his own honor, forever.

"The sweet remembrance of the just
Shall flourish when he sleeps in dust."

One of our resident Clergy,—of acute perceptive and cultivated taste,—was moved, not long since, upon the occasion of a funeral service commemorating a National Sorrow, to the following apt deliverance:—

"Horticultural Hall is swiftly becoming the gallery of the City's honored dead."

Could the Society be lauded with a higher compliment? Contemplate the series, imperfect as it is (and, if it must needs

be completed by death, it is to be hoped it may long remain so deficient!) from WALDO—the thoughtful founder, to SALISBURY,—our latest and most munificent benefactor! What one of our associate Members need be ashamed to show our Hall? To point to those almost speaking features; to recall each public or private career,—cycles as it were, of diligent, faithful, unintermittent usefulness! Upon the farm, or in the council chamber; by the busy marts of trade, or upon the judicial bench; filling the highest places of the Commonwealth, or engaged in equally honorable, and perhaps more arduous, civic administration; where were they not found ready at call and ever equal to the emergency! The writer is one who has thrilled at the story,—half fable, half history,—of Camillus and Cincinnatus;—those strong Terræculturists of old, whose ploughshares were of necessity swords;—alike ready at the behest of the Seasons or the imminent need of the Republic. And therefore he cannot wonder that the elder Lincoln;—fresh from the patriotic counsels that secured Louisiana, and affirmed the American Republic; should turn for diversion from those classic studies whereof he was so fond, and be found active in the organization of the Worcester Agricultural Society! Later,—when well-earned competence brought with it the prospect of a comfortable and serene old age,—is it surprising that Daniel Waldo applied himself to lay broad and deep the foundations of our own Worcester County Horticultural Society; which, without his careful and timely provision, would scarcely have survived its first decade! One and all filled the full measure of their opportunities,—heaped full and running over. Nay, they created those opportunities, often; never sparing themselves when the gratuitous lecture, or the timely editorial, might avail to awaken attention and foster inquiry. So that we may well appropriate for them the epitaph upon *Sir* Christopher Wren; and to him who would ask what hath Earle and Colton, Jaques, or Ripley, wrought at seed-time or harvest; in the bud, or at entire fruition;

"Si quæris monumentum, circumspice!"

Perhaps we may never possess the portraits of William Lincoln, or Christopher C. Baldwin,—the pioneers of local

floriculture and pomology; it may be out of our power to depict the benignant features of Oliver Fiske—*primus inter pares;*—but it will be the easiest thing in the world to complete that gallery, so happily commenced. Nor, for the fulfilment of this purpose, will it be necessary to withhold from the Boussoc, the Pumpkin Sweeting, or the Marigold, their meed of surpassing merit. A steady pursuance of the policy, heretofore initiated by the Committee on Library and Publication, of making at least one addition, annually, to the portraits upon our walls, will achieve much. The Committee hope to estimate promptly and properly, what should devolve upon the Society to accomplish. Should it be their good fortune to be made the recipients of other benefactions, like some that have so recently enriched you and graced this Hall; they will still crave and solicit, so long as one of our worthies continues unportrayed, or a single panel remains vacant.

"Cast thy bread upon the waters; for thou shalt find it after many days!"

The effort of the writer, to trace the origin or early history of this Society, as disclosed in a brief correspondence with the late *Hon.* Stephen Salisbury, was narrated in his Annual Report for 1884. More vivid light is thrown upon the obscure past by Louis A. Maynard, Esq., the record of whose own indefatigable personal service is so conspicuous upon the pages of our published Transactions. Mr. Maynard was one of our local pioneers in improved pomology; and his expression of holy horror at an intimation by the late *Gov.* Bullock, that he proposed to ingraft upon the Bosc, still occasions a quiet chuckle in Horticultural circles. Mr. Maynard writes *calamo currente:*—

WORCESTER, *September*, 1885.

EDWARD W. LINCOLN, ESQ., *Secretary, &c.*

Dear Sir.—I have read in your last Horticultural Report, 1883–4, the correspondence between yourself and the late Hon. Stephen Salisbury.

Your question,—who was the originator,—the father of the Horticultural Society, I can answer directly and truthfully; and show Mr. Salisbury's "*impression*" to be a *reality.* I go back to the period of 1838, or near thereto. William Lincoln was, at that time, the

owner of the old Lincoln Homestead Farm, on Lincoln Street, which he carried on, through a tenant. The evening before one of the Agricultural Exhibitions, I walked out to his house with him. He got a lantern, lighted it up, and then got a handle basket, and we crossed Lincoln Street into the lot Easterly of the Street, then a large mowing-lot and a portion of it considerably covered with Apple-trees. I held the lantern, while he picked apples enough for two large dishes, or plates, which he carried aback with him to his office that evening. The next morning he put them in the Town Hall, now the City Hall with its extensions, on exhibition. The Hall, at that time, was occupied, one portion for the products of the dairies; and the other, and much the larger, by the ladies, for their great display of fancy needle-work.

Subsequently, he drafted a brief paper, the purport of which was the formation of a Horticultural Society, and he himself, in person, called upon many of the principal householders of Main Street, and its adjoinings, for signatures for membership.

There is a class of persons in this world who seem to be imbued with a sort of personal magnetism. They attract men to them. They soften down prejudices, measurably harmonize conflicting opinions, and lead men to the accomplishment of great results. William Lincoln was, emphatically, of this class. His kind and genial manner, and his ever readiness to do any one a kindness, if in his power, attracted men to him; and with a feeling to do him a kindness, if within their power.

He quietly, but efficiently, continued his work, till the Worcester County Horticultural Society was legally organized and established. And he lived, and lived only, to see it make an earnest and vigorous beginning, when, after a brief illness, he passed from this world, in "*his manhood's early prime*," deeply and sincerely mourned by all who knew him.

"*Men die; but their works live after them.*"

The Worcester County Horticultural Society, now an honor to the City and County of Worcester, the work of William Lincoln, lives, and his name should be forever associated with its history and honored in its annals.

Sincerely and truly, yours,

L. A. Maynard,

30 Clifton Street.

Our Fiftieth Anniversary is fast drawing nigh, and it will be well for those, who may survive to manage its celebration, if they possess themselves of all attainable information upon the

facts of the first conception and youthful life of a Society that now yields precedence to none in wholesome vigor and general usefulness.

All which is respectfully submitted,

by

EDWARD WINSLOW LINCOLN,

Secretary.

HORTICULTURAL HALL,

Worcester, Massachusetts,

November 4, A. D., 1885.

REPORT OF THE LIBRARIAN.

To the Members of the

Worcester County Horticultural Society:

Your Librarian respectfully submits the following report for the year just closed. The number of Books and Periodicals taken out during the year is 357. The number read and consulted in the Library room is probably twice as many, no accurate account having been kept of such. It is not necessary for me to say to the members of this Society that your Library is a very valuable one. From a very small beginning this Library has gradually increased till now its books and periodicals number more than 2,000. Many of its books are elegantly bound, beautifully and profusely illustrated and necessarily costly, and which could not be replaced, if, by accident of fire or otherwise, they should be destroyed.

But little has been done the past year in the line of binding. There is real need of more book-cases for volumes already bound, therefore your Library Committee have thought best to defer operations in binding until more shelf-room is provided.

The additions to the Library during the year by purchase or gift are as follows:

Cyclopædia of Practical Floriculture; by Mrs. C. H. Turner; Society.

Index to "The Garden" from 1871 to 1881; Society.

Report of the Crops of the year and of Freight rates of Transportation Companies, Dec., 1884; Henry Phelps.

An Investigation of the composition of American Wheat and Corn; Henry Phelps.

The Northern Sugar Industry. A record of its progress during the season of 1883; Henry Phelps.

The Soils and Products of Southern Louisiana; Henry Phelps.

Report of the organization and management of Seven Agricultural Schools in Germany, Belgium and England; Henry Phelps.

The Proper Value and Management of Government Timber Lands; Henry Phelps.

The Climate, Soil, Physical Resources and Agricultural Capabilities of the State of Maine; Henry Phelps.

Report of Observations and Experiments in the practical work of the Division made under the direction of the Entomologist; Henry Phelps.

Modern Forest Economy; by John C. Brown; E. W. Lincoln.

Pine Plantations in France; E. W. Lincoln.

Forests and Moisture, or Effects of Forests on Humidity of Climate; by John C. Brown; E. W. Lincoln.

Observations in regard to Insects injurious to the Apple; Mass. Agr. Station.

Notes upon Insects injurious to Farm and Garden Crops; Mass. Agr. Station.

Observations in regard to the vitality of the seeds of various weeds, and the causes of certain diseases of Grasses; Mass. Agr. Station.

Notes on feeding experiments with Corn Ensilage; Mass. Agr. Station.

Notes on feeding experiments with Gluten Meal as a constituent of the daily diet of Milch Cows; Mass. Agr. Station.

Notes on feeding experiments with Pigs; Mass. Agr. Station.

Fodder and Fodder Analyses; Mass. Agr. Station.

First Annual Report of Mass. State Agr. Station.

Transactions of the Hingham Agricultural and Horticultural Society; year 1884; Frances H. Lincoln.

Revue Horticole; 1884; Society.

The Journal of the American Agricultural Association; Vol. 1; H. Phelps.

Annual Report of the Commission of Public Grounds for 1884; E. W. Lincoln.

Vols. 7 and 8 of Reports of Agriculture.

Planting Trees in School Grounds and the Celebration of Arbor Day; Bureau of Education.

City School systems in the United States; Bureau of Education.

Catalogue of the Microscopical Exhibit of the U. S. Department of Agriculture at the World's Industrial and Cotton Centennial Exposition, New Orleans; 1884, 1885; William Saunders.

A report of Exhibits illustrating Agricultural Statistics at the World's Industrial and Cotton Exposition at New Orleans; by J. R. Dodge; William Saunders.

A Descriptive Catalogue of the Grasses of the United States,

including especially the Grass collections at the New Orleans Exposition; by Dr. George Vasey, Botanist of the Department of Agriculture, Washington, D. C.; William Saunders.

Le Jardin Fleuriste; 4 Vols.; Society.

L'Illustration Horticole; 23 Vols.; Society.

Fruit Culture; 1885; by W. G. Strong; Society.

Five Acres too much; Society.

Tenth Anniversary of the North Brookfield Railroad; T. C. Bates.

The Sugar Industry of the United States; by H. W. Wiley.

Teachers' Institute Circular; No. 2; Bureau of Education.

Treatise on Silos and Ensilage; by Dr. J. F. Boynton.

Report on the Condition of Growing Crops; Department of Agriculture.

Report of the Worcester Schools; 1884; Supt. Marble.

The Special Characteristics of Tornadoes, with special directions for the protection of life and property; Signal Office.

Report of the character of six hundred Tornadoes; Signal Office.

The Michigan Horticulturist, a monthly Publication; Society.

The American Florist; Society.

Gardening Illustrated; 1885; Society.

Vick's Monthly Magazine; 1885; Society.

The Garden; 1885; Society.

The Gardener's Chronicle; 1885; Society.

The Agricultural Gazette; London; 1885; Society.

The American Agriculturist; 1885; Society.

The Gardener's Monthly; 1885; Society.

The Country Gentleman; 1885; Society.

The Massachusetts Ploughman; 1885.

The Worcester Directory; 1885.

All which is respectfully submitted.

CHARLES E. BROOKS,

Librarian.

HALL OF FLORA,

November 4, 1885.

REPORT OF THE TREASURER.

CHARLES E. BROOKS, *Treasurer*,

In account with the

WORCESTER COUNTY HORTICULTURAL SOCIETY.

1885.

Nov. 1.	To Cash on hand Nov. 1, 1884,	$1,588 83	
	" for rent of Stores 1 year,	3,100 00	
	" " " " Hall,	3,102 21	
	" " new Members,	23 00	
			$7,814 04

EXPENDITURES.

By Cash paid Premiums, 1884,	$1,602 00	
" " James Draper as Judge,	68 00	
" " H. F. A. Lange as Judge,	68 00	
" " E. W. Lincoln, salary,	400 00	
" " C. E. Brooks, "	1,000 00	
" " Extra Labor, carting rubbish, and sundry items,	242 40	
" " City of Worcester, Taxes,	480 53	
" " " " " Metered Water,	69 67	
" " Insurance,	267 00	
" " Worcester Gas Light Co.,	252 80	
" " Library, portrait, &c.,	298 75	
" " Interest,	164 30	
" " Printing and Advertising,	250 63	
" " F. W. Wellington, Coal,	74 65	
" " Boston and Sandwich Glass Co.,	61 96	
" " New-England Telephone Co.,	40 25	
" " Henry L. Parker,	57 20	

By Cash paid Strauss Brothers,	$29 50	
" " J. S. Perkins, Painting Roof,	14 64	
" " S. P. Bond, Evergreen,	17 70	
" " O. S. Kendall & Co.,	11 80	
" " Sundry small bills,	74 55	
		$5,546 33
Balance on hand Nov. 4, 1885,		2,267 71
		$7,814 04

CHARLES E. BROOKS,

Treasurer.

HALL OF FLORA,

November 4, 1885.

WORCESTER COUNTY HORTICULTURAL SOCIETY.

Hall of Flora. *Worcester, Mass.*, 14*th Sept.*, 1885.

H. L. PARKER, ESQ.:

My Dear Sir.—

Why not write out your impressions gathered at the late Session of the American Pomological Society? Write them out while they are still fresh in your memory. I doubt not that they would prove a source of pleasure and instruction to your associates in our local Society. I can most certainly speak for myself.

Believe me, sincerely,

EDWARD WINSLOW LINCOLN,
Secretary.

Worcester, Mass., Oct. 28, 1885.

EDWARD WINSLOW LINCOLN, ESQ.:

Dear Sir.—

In response to yours of Sept. 14th, I herewith enclose a transcript of my observations and impressions at the late biennial session of the American Pomological Society at Grand Rapids.

Most sincerely yours,

HENRY L. PARKER.

REPORT OF THE DELEGATE TO THE AMERICAN POMOLOGICAL SOCIETY.

The selection made by the American Pomological Society of a place for its biennial session of 1885 was the occasion of much surprise and comment.

An eminent Englishman on his way to these shores for the first time, after what seemed to him an interminable voyage, gravely enquired of the steamer's captain, "Do you not think it possible, Sir, that you have sailed *past* America?" When your delegate was first commissioned to represent this Society at the Convention at Grand Rapids, and had started to fulfil his mission, his idea of the location, size and importance of that place was quite as nebulous as the English Tourist's conception of the geography of this country. Nor was this nebulous state of mind unshared by other delegates. The sleeper attached to a lumbering freight-train, and progressing at the rate of twelve miles an hour, which drew us westward from Detroit, was full of malcontents, demanding in terms more terse and vigorous than polite, larded well with expletives withal, why the back-woods of Michigan should have been selected as the assembling place of a Society of national membership and national importance.

But when we arrived at this seeming Ultima Thule all misgivings vanished—or were changed rather to astonishment and delight. We found Grand Rapids a charming and thriving city of fifty thousand inhabitants—with large first-class hotels, churches and public buildings, rivalling in costliness and taste, those of eastern cities, rejoicing even in what Worcester has long sighed for in vain—a magnificent Government building. A noticeable feature was the school-house of model architecture

and convenience, with school-house yard laid out in lawns and flower beds, with concrete-walks, and planted with shade-trees and evergreens. We found evidences of taste and refinement all about us, in the well kept lawns and elegant dwellings of Queen Anne style, in which the eastern portion of the city abounded.

The scenery was unsurpassed in beauty. Mr. Barry, the presiding officer of the convention, declared that the view of the city from the bluffs—lying as it does on either bank of the Grand river, which, with its broad and rapid current, intersects the valley of some half a mile in width—would alone repay each delegate for the trouble and expense of his journey.

The character of the population was no less surprising than the evidence of thrift and worth. They were an intense people. There were no dudes; no dilettanti; no loafers at the street corners; no idle gazings or questionings. Every man you met was on the "qui vive"—civil and courteous but intent upon the business in hand. There seemed to be no poor people—no poor quarters. Everybody was apparently well-to-do. All the dwellings however humble presented a neat and tidy appearance.

Such was our place of meeting. And when the Convention assembled and the work began, the wisdom of selecting such a locality was soon apparent. It was in the first place in the heart of the great apple and fruit-growing region of the Northwest. The State of Michigan has, within the last one or two decades, been making quiet and almost unnoticed but rapid strides, not only in wealth and population but in the importance of its agricultural and mineral products. From the twenty-sixth State in the Union in point of population it has risen to be now the ninth. In the production of iron and copper ore and in the manufacture of salt and lumber it is the first in the United States. In the raising of fine blooded horses it outranks every other State not excepting Kentucky. Only three other States raise more sheep. Only three other States produce more wheat. Only seven other States have more capital invested in manufactures.

But notwithstanding this wonderful development of mineral and agricultural wealth, fruit-growing is destined to be, if it is

not already, a paramount interest. The soil of Michigan is admirably adapted not only to the apple but to the grape and small fruits of every kind and variety as well.

In the felicitous language of President Angell in his welcoming address—"It must be confessed that Nature has been very gracious here to the fruit-grower. She has furnished him a rich, warm and mellow soil which seems made for orchards, vineyards and gardens. She has surrounded this fair peninsula with the great lakes, which not only encircle her as a zone of beauty and furnish her a highway for commerce, but which also temper her atmosphere by their genial warmth in winter and cooling breath in summer. Though occasionally we suffer from a severe winter like the last, as a rule the friendly lake upon the west draws the sting from the tail of the fiercest Dacotah blizzard and shelters our fruits up even to the northern extremity of the lower peninsula. In no State east of the Rocky mountains can delicate fruits be grown in so high latitudes as this. During most of the year breezes soft as those of Eden woo the peach, the grape and the pear, and coax them to rejoice us with the autumnal splendor of their fruitage. A drive through any of the western counties at any time from June to October will delight the eye with a view which rivals that in the fabled garden of the Hesperides. If we have not Paradise we have at least a charming suggestion of it."

The following statistics show that these bountiful gifts of Nature—a generous soil and genial climate—have been duly improved:— In 1883 the whole State of Michigan produced for the market, besides home consumption, 199,952 bushels of peaches. In 1884, 5,000,000 bushels of apples. In 1885, 200,000 bushels of small-fruits. It has 241,000 acres of apple orcharding and 14,600 acres of peaches.

The State Horticultural Society had made special efforts to secure a good display of fruit and the result more than justified its expectations. Vice-President Barry said of it: "The exhibit is a wonderful one—worthy of a week's study. It is especially valuable since so many western fruits are displayed. We have had many larger, none so instructive."

The Michigan State display numbered, it was said, two

thousand plates of apples, while the local displays of apples, pears, grapes and peaches from different counties in the State largely swelled this number. There were also one hundred plates of wild-fruits, nuts, &c., indigenous to Michigan, exhibited by Prof. Bailey of Lansing Agricultural College. Ellwanger & Barry exhibited one hundred and ten varieties of pears; Marshall P. Wilder one hundred varieties; B. G. Smith of Boston sixty-one varieties; Geo. W. Campbell of Ohio twenty-six plates of grapes and forty of apples. Missouri was represented by one hundred and forty plates of apples, pears and grapes. The Ohio State Board of Agriculture presented a fine collection of the same fruits. There were twenty-eight plates of fruits from Texas. The Horticultural possibilities of Minnesota were indicated by twenty-eight varieties of seedling crabs. And there were plates of oranges, Japan persimmons, and collections of cocoa-nuts, figs, sugar-cane, pomegranates, pears, sweet potatoes, peanuts, cotton and corn from different localities in the South.

The sessions of the Society were held in a large and well-lighted church, of good acoustic properties and free from noise or disturbance. It was announced at the opening of the session that no excursions; no banquetings had been planned; in order that nothing might interrupt or interfere with the business of the Convention; that the Michigan members esteemed it a great privilege as well as honor that the Society had consented to hold its Convention there, and they wished to make the most of so grand an opportunity for instruction in Pomological science.

In the absence of the President, Marshall P. Wilder, Patrick Barry of Rochester was made the presiding officer.

Welcoming addresses were made by the Mayor of the City, by T. T. Lyon, President of the Michigan Horticultural Society, and by President Angell of the State University.

Among the notable persons present were Norman J. Coleman, United States Commissioner of Agriculture; Dr. C. E. Bessy of the State University, Nebraska; Prof. J. C. Arthur of the New York Experiment Station at Geneva; Prof. W. R. Lazen by of the Ohio Agricultural Experiment Station; Peter Gideon of Excelsior, Minnesota, the veteran Pomologist of that State and the pioneer of the Northwest in the organization of new varieties of

hardy apples; T. V. Munson of Denison, Texas, the grape enthusiast; and Geo. W. Campbell of Delaware, Ohio, also a veteran in grape culture; Parker Earle of Illinois, one of the Commissioners, and in charge of the fruit department at the New Orleans Exposition; Dr. F. M. Hexamer of New York, and Prof. A. J. Cook of the Michigan State Agricultural College.

The discussion of new fruits with which the business of the Convention commenced, began with, and for obvious reasons lingered long upon, the Apple, and the crucial test of every variety named, was its hardiness. The havoc made in apple orchards in all the States west of the lakes, by the severity of last winter, has made this an indispensable requisite to all growers in those localities. The testimony of all the delegates from those States was unanimous upon that point. In Minnesota, even the Oldenburg, which has hitherto been considered iron-clad, was killed. Mr. Gideon said that the thermometer with him at Excelsior, Minnesota, had gone as low as 49° below zero. One delegate stated that he had cut from his apple orchard two hundred and fifty cords of dead wood. Among the new apples which received favorable notice was the Yellow Transparent. It was pronounced a hardy apple, better than the Early Harvest and earlier; Mr. Chase of Pennsylvania had received several hundred reports and considered it the coming early apple.

Of the new hardy apples originated by Mr. Gideon the most promising were the Excelsior, the Martha, and the Gideon.

The Excelsior is from the seed of the Wealthy, of light yellow color, striped with bright red, of best quality, season September.

The Martha is from the seed of the Oldenburg—a great bearer—a little below medium in size, a bright glossy yellow in color, shaded with light bright red—very fine for all culinary purposes—season from October to November.

The Gideon is supposed to be a cross between the blue pearmain and a crab. It resembles the blue pearmain.

The Phaler is an apple of the Yellow Transparent order—about six days later—eatable about the 25th of July.

The Salome was thought to be a valuable apple—season from January to March.

The Mann apple originated in Otsego—is a very vigorous fine grower—best cooking apple in its season—will keep as long as the Roxbury Russet.

Other apples favorably mentioned were Jacob's Sweet, the Northwestern Greening, Kellogg Russet, Somerset, which originated in Somerset, Maine—a great bearer.

The Low, also one of Mr. Gideon's apples—first-class in quality—very early—an enormous bearer and an upright grower.

Professor Budd said of the Longfield apple—" that it was adapted to the whole country from the Atlantic to the foot-hills of the Rocky mountains—its color is yellow with a blush—keeps through winter till February or March—has given such perfect satisfaction that it should be noticed—quality like the Fameuse and equally as good."

The testimony as to the Tetofsky was that it is earlier than any other apple of Russian origin—rather tart—ranks with the Red Astrakan and the Oldenburg.

The Wealthy is the first of the Gideon apples—Mr. L. C. Fairbanks of Michigan says " the Wealthy will take the place of the Snow—is one of the best of the early winter apples."

Of the new varieties of Grapes those most favorably mentioned, were the Empire State, the Niagara, Ulster Prolific, B. F. Hayes, and Early Victor.

The Empire State is not yet upon the market. It is a white grape, a cross of the Hartford Prolific with the Clinton, originated by Ricketts of Newburg, N. Y., now owned by Pratt Bros. of Rochester. Mr. Campbell of Ohio says of it—" The Empire State is a circumstance in the way of improvement—have raised it for three years and tested it in various ways, and am satisfied it is as healthy in foliage as the Concord and as hardy—and it is of fine quality. I should class it pretty nearly very good—not foxy—resists mildew."

The Niagara, it was thought, would prove a popular market grape. Mr. Rogers of New Jersey placed it on a par with the Concord in health, but some of the Southern members complained that in their section it was subject to rot.

Mr. Smith of Mass. said of the Hayes Grape:—" Known it for 11 years—always received with favor—prime quality. All

in Mass. have a high opinion of the grape—perfectly hardy—very prolific—week earlier than the Concord—seedling of the Concord—best white grape—free from mildew."

Mr. Campbell thought it not so vigorous as the Concord. Mr. Manning of Mass. said "that last year it had mildewed."

The Early Victor is a strong grower—better in quality than the Concord—no mildew or rot—earlier than the Concord.

Shaffer's Colossal Raspberry was the only variety of Raspberry coming under discussion and worthy of mention. It was called one of the strongest growers, productive and one of the best—more hardy than Cuthbert—very large.

W. C. Strong says "it is good in Massachusetts although its color is against it."

Mr. Bennett of Grand Rapids said "he preferred it to any one berry for home use."

Dr. Hexamer said "if people could eat it with eyes shut it would be a splendid berry."

Mr. Streeter of Ohio pronounced it the best berry for home use.

Of the Strawberry no special mention of new varieties was made.

Parker Earle said of the Crescent, "that he preferred it to any other berry for the markets, fertilizing it with the Sharpless."

Mr. Fox of Mich. stated "that he had planted the Manchester fertilized with the Wilson and that he had raised twice the quantity that he had from the Wilson—and the Manchester brought better prices."

Mr. Harrison of N. Y. remarked "that he had always found long-necked strawberries a mark of excellence."

Mr. Patrick Barry gave a short but interesting account of the Apple Congress he had attended in England since the last biennial session of the Society. He stated that there were collections from every district in England, and in all, 4500 named plates—the largest collection that had ever been made—that they were sadly in want of a proper nomenclature in England. Names like the following were common, viz: "Old Tom," "Cabbage," "Bloody Bill," "Curl Tail," "Fat Ox," "Pig's Nose." There were twenty varieties beginning with the prefix

"Lord"—thirty with "Old." Five were named Sheepsnose with some qualifying adjective. During the present Autumn a Pear Congress was to be held under the same auspices.

The most important feature of the Convention were lectures from the Professors of certain of the Agricultural Colleges and Experiment Stations, and the able papers presented by different members of the Society to whom special topics had been assigned.

Notable among these was the lecture of Prof. Bessy on "Injurious Fungi," and the papers of Prof. Arthur on "Pear Blight," of A. J. Fuller of New Jersey on the "Influence of Pollen," and T. V. Munson of Texas on "Grapes." The paper of Mr. Munson was the result of years of experiment and patient investigation. He treated the subject from a scientific standpoint, making a classification which has never been attempted before in so thorough a manner. The importance of thorough breeds in fruits as well as in animals was shown, and suggestions made as to how they are to be produced. It was shown that only through the practice of the principles of evolution can this result be reached. A tabulated list of over 150 varieties of grapes giving common and botanical name, growth, hardiness, vine characteristics, diseases, and description of fruit was annexed to his paper. This table contains over 3000 separate facts. The specific outlines of our native grapes was shortly given, with their adaptabilities to soil, climate, &c. The most important species for experimentation were noted. The great importance of stamen characteristics and the beneficial results following a knowledge of the same by the practical grower as well as the experimenter. The effects of crossing and hybridizing were considered.

Mr. Barry said "that the paper was in his judgment the most valuable and important which had ever been presented to the Society on that subject." Mr. Campbell of Ohio pronounced it exhaustive. Of the other lectures and papers I annex to this report such brief abstracts as I have been able to make.

The Convention was harmonious throughout its entire session, and its proceedings interesting to an absorbing degree, so much so, that on different occasions, motions to adjourn for meals were

lost again and again, and the session prolonged far beyond the usual hour. Mr. Barry is a most admirable presiding officer, combining in a rare degree dignity and decision of character with urbanity. His thorough knowledge of every aspect of pomological science as well as his acquaintance with all the prominent members and the history and transactions of the Society from the beginning enabled him to keep the business well in hand—and it might truly be said that few Conventions of a like nature were ever held where less time was wasted. It was the unanimous verdict that the Convention had been a wonderful success. Members who had been present at nearly all the meetings of the Society since its foundation, declared that at no meeting they had ever attended had the papers presented been of a higher order or the discussions and other proceedings more instructive.

HENRY L. PARKER.

APPENDIX A.

Abstract from paper of Prof. J. C. Arthur on "Pear Blight:"

The experiments on which the address was based have been carried on at the Agricultural Experiment Station at Geneva, N. Y., during the last two years. The first work in this line of investigation was done by Prof. Burrill of Illinois, who showed by many experiments that the disease may be introduced into healthy branches of the pear-tree by transferring a minute particle of diseased tissue or the viscid substance accompanying the disease to the healthy branch. He also found that germs or bacteria were an invariable accompaniment of the disease. The experiments at Geneva corroborated this.

The inoculation was soon found to be as certainly conveyed when a drop of water was used which had been in contact with diseased pear wood and had taken up some of the germs as when the exudation or diseased tissues were used. The disease so introduced in healthy tissues showed itself by the blackening of the bark in about a week on an average. It was found to grow the best in the most succulent tissues, such as the tips of young shoots, and especially in unripe fruit. It progresses through the limbs most rapidly in the warmest weather but is not killed by cold, being able to make a slow growth all winter.

Mode of Attack—Experiments to learn the manner in which the germs enter the pear-tree were at first unsuccessful. Diseased branches tied into a tree of healthy growth did not communicate the disease. Apparatus arranged to draw air across diseased branches and then over healthy ones, gave no results. A potted pear-tree was watered for over a month only with water filled with the germs of the disease and still remained healthy. An arrangement to permit a slow dripping of water containing the germs upon very young pear growth did, however, succeed in conveying the disease to healthy tissues. It was observed the present spring that an English hawthorn had blighted badly. The short spurs on the sides of the limbs bear clusters of flowers and it was observed that these flowers on the blighted limbs had made no growth since the time of opening, although it was the latter part of June and the unblighted limbs had the fruit two-thirds grown. The germs of the disease had evidently entered through the flowers a full month previous, and had only recently been conspicuous by the dying of the leaves. But many of the twigs were dead where there were no flowers; here the germs had evidently entered through the tenderest tissue of the growing tip and progressed downward, as was shown by the end leaves being dryest and apparently longest dead.

Growth of the Germs Outside of the Tree—It had now been shown

that the diseased germs enter the tree through the tenderest tissues at the ends of the branches and in the flowers, usually in early spring, but where the germs come from had not yet been discovered. The first trial was to learn if the germs would thrive outside the living tissues of the tree. A nutritive solution was made by boiling some corn meal in water and using the colorless liquid. A particle of blighted pear twig was introduced into such a solution and in one to two days at ordinary room temperature the whole liquid was filled with the germs. It was also found that they would grow in hay tea, made by boiling hay in water, and in various other things, including barnyard manure, although not very vigorously in the last. It now became evident that the course of the disease is usually something like this: The germs in a diseased tree escape to the surface in the sticky exudation, they are washed free of the gum surrounding them by the rains, drop to the ground and multiply indefinitely in decaying vegetable substances either beneath the trees or in marshy or wet places at a distance. Here they may pass the winter and even live for several years. They are borne into the air when dry by the winds, or are carried up by evaporation. Being so extremely minute they may be borne through the air for great distances and coming in contact with the moist surface of tender twigs or the centre of the flower, find entrance to the tree and again produce the disease.

Proof that a specific germ causes the disease.—So far it has been assumed that the germs accompanying the disease are the cause of it. The attempt was now made to prove rigidly that such is accurately true. It will be remembered that the disease was communicated by inoculating with the diseased juices washed out with water. It is evident therefore that the disease must be due to one of two things: either to the germs or to the juices which accompany them. The first attempt was to separate the germs from the juices about them. This was done by a succession of cultures. A small drop of water containing pear-blight germs was introduced into some corn meal solution in which all life had been killed by boiling it. The germs increased by growth and filled the liquid, the juices accompanying, not being living matter, did not increase but were diffused through the whole liquid, and so greatly diluted. A small drop of this culture was introduced into a fresh solution of corn meal; the germs multiplied and filled the liquid, while the very small part of the original diseased juice, which had been introduced with the germs, was again greatly diluted. Again, a drop from this culture was transferred to a fresh preparation, and so on through six cultures. From the last culture a drop was put into growing pear tissues, three months from the time the germs were taken from the tree to start the first culture, and the disease was produced in the usual form. By this means the germs had been kept alive by constant growth, while the juices accompanying them had been so enormously diluted as to be practically absent. The attempt was now made to show that the juices of the disease by themselves could not produce the disease. This was done by filtering out all germs from an infusion made by slicing up diseased twigs in water, by passing it through a fine porcelain jar, such as are used for

electrical batteries. The juices thus obtained, free of all germs, in no case produced disease when inoculated into healthy tissues. The proof was therefore absolute that the germs only were the cause of the pear blight.

It was now necessary to show whether any kind of germs would cause blight, or whether there is but one specific kind. For this purpose inoculations were made in pear-trees as before, using the germs from rotting tomatoes, from various kinds of decay, etc. In no case was there any disease produced. Several questions were asked the professor which received immediate and intelligent answers.

APPENDIX B.

Abstract from paper on "The Influence of Pollen," by A. J. Fuller of New Jersey:

In 1859 I commenced to raise strawberries from seed, partly for the purpose of producing new varieties, but principally to test certain theories then frequently discussed relative to the value of the pistillate varieties. The late Wm. K. Prince of Flushing, N. Y., claimed that the pistillates were and ever continued to be the most productive owing to their unisexual character. This theory was certainly a very plausible one, but unfortunately it did not hold good when tested in the field and basket. In conducting my experiments during the year named and several succeeding ones I cultivated some of the most noted of the pistillate and staminate varieties known at that time. Among the former I may mention Hovey's Seedling and Prince's Scarlet Magnate. The latter was quite a large variety, being very regular in form, nearly globular or slightly compressed, bright scarlet, flesh white, firm, not high flavored, but good. The Hovey is so much better known that I need not refer to its peculiar characteristics.

In cultivating these and other pistillate varieties I employed various staminates to supply the necessary pollen for fertilization. When I used the Boston Pine, a staminate variety, also raised by Mr. C. M. Hovey, to fertilize the flowers of the Scarlet Magnate and Hovey's Seedling, I was unable to see that the pollen had any marked influence upon the size or color of the berries, probably owing to close relationship and great similarity of color and form of all three varieties; although at the time I imagined, even if it was not really a fact, that the Hovey was less acid when the flowers were supplied with pollen from the Boston Pine than from such very acid varieties as the

Wilson's Albany. But when I employed such a distinct male variety as the Peabody for supplying the pollen the effect upon the size and form of the berries was very marked and readily seen. The long neck and deeply ribbed or coxcomb shape of the Peabody were characteristics that would be readily transferred by fertilization if any can be, by such a process. By employing varieties like the Peabody and Triomphe de Gand to supply pollen for such pistillates as those named, the influence can readily be seen to extend far beyond the seed, as we know theoretically that it must, but perhaps rarely noted, because in ordinary horticultural operations we do not seek scientific truths with as much zeal as we do marked values and profits. It is to be presumed that every practical horticulturist must have observed that where pollenation fails in the strawberry, the receptacle or fruit upon which the seed rests or in which it is imbedded fails to enlarge or continue growth, and if all the pistils of the flower escape pollenation, not only the entire fruit withers away, but also the flower-stalk, even down to the very roots of the plant. I refer now to pollenation as distinct from fertilization, and use the term as an equivalent of cohabitation in the animal kingdom, which does not necessarily extend to or result in impregnation. Simple pollenation may cause a responsive action, resulting in the ripening of the pistil, and yet the effect of the pollen may fall short of actual fertilization, hence the frequent occurrence of false or imperfect seed among all of our cultured fruits, and sometimes, but less rarely, among the wild ones.

I became so fully convinced at the time referred to, that the influence of the pollen in the strawberry did extend, under favorable conditions, so far beyond the seed that it often changed the form, color and flavor of the fruit that I referred to the subject in the *Small Fruit Culturist*, published in 1867, pages 44 and 45, and from which I beg to copy a paragraph or two, as some of our horticulturists appear to have overlooked what I said on the subject at that time. In speaking of the usual practice of planting staminate and pistillate varieties in alternate rows, I said: "I would suggest whether it is not possible that variations may have been made on growing plants by the influence of the pollen from the different varieties. It is generally supposed that no effect is produced except on the seed, but as it is most conclusively proved in animal physiology that the female retains the effect of the first impregnation in her system for years, may not the same be true of plants, and the admixture or deterioration of one, and the improvement of another kind growing in close proximity be caused by the absorption of qualities each from the other." After referring to the effect of non-pollenation of the pistils I said further: "If the strawberry seed was large enough to be readily examined we should probably see a difference in color and form, just as we notice in mixed varieties of corn. In the latter we can see that the influence of cross-fertilization extends further than the seed, because its receptacle (cob) is often changed beneath the kernel to a color similar to that of the variety which produced the pollen." About the time I wrote the "Strawberry Culturist," 1862, I called the attention of several of my acquaintances to this subject of the influence of the

pollen on the quality of the fruit, and their reports were so uniformly in accord with the results of my own investigations that I felt warranted in writing the following paragraph in addition to those already quoted, to wit: "It is often asserted that the Hovey is better when fertilized with one kind than with another, and may not this be true, further than that of being fully supplied with pollen?"

Since making my first experiments for the purpose of determining the influence of the pollen on the strawberry, I have observed many instances of changes in the color, form and flavor of other kinds of fruits as well, which as it appeared to me were directly traceable to the influence of pollen, although it must be admitted that with our improved cultivated fruits we must expect an occasional reappearance of ancestral characteristics which may mislead us in attributing certain results to a fictitious cause. Still, when a branch of an apple-tree generally producing fruit with a smooth skin bears russet apples and we can find no other cause for the change but the close proximity of a tree bearing russets we are inclined to believe that pollen has had something to do in producing the change observed. Because similar or like results are not produced every year only indicates that self-fertilization is the rule with the flowers of such fruits as the apple, and it is only when the pollen of a particular branch or whole tree is less potent than that on a neighboring one that cross-fertilizing occurs.

I doubt not that every observing practical member of the American Pomological Society can call to mind many such instances of cross-fertilization among our larger cultivated fruits as well as among garden vegetables, especially with melons and squashes, for with the latter the influence of the pollen is more readily seen to extend beyond the seed than with such small-fruits as the strawberry.

That our vegetable physiologists have given us very little information on this subject is not at all strange, for very few of them have ever had their attention drawn to it; and furthermore, the extent of the influence of pollen must be studied in the field and garden and not in the laboratory or with dried plants and fruits.

In a few of the more recent works of vegetable physiologists it is admitted that the influence of the pollen extends to the entire formation of what is commonly called the fruit. Julius Locke, in his "Text-book of Botany," edition of 1882, page 495, says: "The increase in size of the ovary, which is frequently enormous (in curcurbita, cocus, etc., several thousand times in volume), shows in a striking manner that the results of fertilization, especially in the carpels, placentæ and seeds; but very frequently similar changes result also in other parts. Thus, it is the receptacle that constitutes the fleshy swelling which is called the strawberry, on the surface of which are seated the small true fruits." Also, on page 594: "But sometimes the long series of deep-seated changes induced by fertilization extends also to parts which do not belong to the ovary, and even to some which have never belonged to the flower." Among the plants so affected he mentions the fig, strawberry and mulberry.

Then again, page 900, he says: "The process of development brought about by fertilization or the union of the reproductive cells is

usually not confined to the resulting embryo, but shares itself also in a variety of changes in the mother plant itself."

This is what I claim to have seen in conducting my experiments with the strawberry a quarter of a century ago—*i. e.*, the influence of the pollen extended not only to the seed and fleshy receptacle or fruit, but to the fruit, stalks and the entire plant. Further investigations in the same direction have only confirmed my convictions in regard to the influence of the pollen reaching so far beyond the seed as to affect the fruit sufficient in many instances to change size, form, color and even the flavor.

In ordinarily practical operations it may not be of any great importance, but every fact in regard to such matter is of value in the hands of those who seek to know something of cause and effect in the cultivation of plants.

APPENDIX C.

Abstract of Address by Norman J. Coleman, United States Commissioner, before the Pomological Convention :—

I thank you, gentlemen, for the compliment you have paid me by inviting me to address you. I came to this meeting to acquire information. I knew I should meet the advanced thinkers, the progressive agriculturists and horticulturists, of the nation. In the addresses and discussions before the society I thought I should gather information that would be useful to me in my official position, and I have not been disappointed. Horticulture is but a higher branch of agriculture. As farmers advance in intelligence and refinement they naturally pay more attention to the culture of fruits and flowers, and to the adornment of their homes. Being by profession, as well as by taste and inclination, a horticulturist, in accepting the official position which I hold I felt anxious to do all in my power to aid and advance our growing horticultural interests. I believe I am the first person who has been placed at the head of our agricultural interests who has been a practical horticulturist, and during my term of office I am anxious to do what I can to promote them. I want your assistance, your encouragement. Suggestions from you will always be welcome and have careful consideration.

I have already put new machinery to work in aid of the horticulturist and agriculturist. Appreciating the heavy annual losses sustained by our fruit-growers and farmers by the rusts, mildews, and blights which affect their crops, I appointed, soon after taking my

office, Prof. Scribner, who was very highly endorsed as a botanist, to make a specialty in the study of Fungi in plants, and he is giving to this subject his entire attention. The members of this society can greatly aid him in the work in which he is engaged. Any information relating to this subject sent to the department will be thankfully received, and any questions that may be asked or knowledge sought will receive attention. I feel that this is a most important field for investigation, and the attention which has been given to this subject by this meeting confirms the wisdom of the course I have pursued in giving this matter special attention. Another subject that I have given considerable thought is the collection of horticultural statistics. Nothing has been done by the department in the collection of information regarding fruit crops. The condition and production of grain crops are carefully reported, but who can tell of the quantity or quality of our fruit crops? Who knows whether there is an over or under production of apples the present year from any official source? The value of our apple crop—that is, the crop that is marketed—cannot be less than thirty millions of dollars. In Michigan alone it is estimated to be over one million of dollars. Apples have a commercial value like other crops, and so have many other fruits, and I shall endeavor in the future to devise some means to collect statistics relating to them. Indeed, I think there ought to be a pomological or horticultural division connected with the agricultural department, and nothing but the lack of funds prevents me from establishing it at once, and I may yet find some means of doing so. As most of you are aware, last June I called a convention of the representatives of the agricultural colleges and experimental stations for the purpose of forming close relations between the department and these institutions—making the farms of these colleges the experimental grounds of the department. The convention was a great success, and the objects sought were accomplished. Hereafter the fruits, seeds and plants, whether collected in this country or from abroad, will be distributed to the different agricultural colleges and tested, and those which are found valuable can be distributed in the respective States in which they are located. I have already commissioned Mr. Leo Weltz, of Ohio, to collect seed fruits and plants from the great steppes of Russia, and he is now engaged in that duty. I hope for important results from this mission. Prof. Budd and Prof. Gibb accomplished a great work for the Northwest by the introduction of valuable fruits from that country, but they were far from being satisfied, and they have faith that Mr. Weltz will be instrumental in doing a good work for this country. But, gentlemen, I will not detain you longer. I want to say, however, that I am but your agent, your servant, in the work I am doing. I want not only your aid, but your sympathy, your support. I feel that I have a great responsibility resting upon me, but with your generous assistance I hope to be able to discharge my duties to your satisfaction and to the satisfaction of the American people. There has never been a time when more intelligent work was needed to be done by the American farmer than now. With insect foes almost innumerable, with blights and mildews

and rusts, with over-production staring us in the face, it is only the intelligent, the progressive, the industrious, that will succeed. The laggards will be left behind.

APPENDIX D.

Abstract of lecture of Prof. A. G. Cook, of Michigan State Agricultural College, on "Economic Entomology:"

The lecturer had displayed on the stage five charts illustrating the different kinds of insects and their growth from the egg and larvæ to the perfect insect. Prof. Cook was introduced by C. J. Monroe of South Haven, the acting-president, and said in substance: The major part of the insects who were so destructive of plant life worked either entirely at night or was so hidden in the soil that the husbandman was not able to discover them. Every vegetable or fruit tree fed a great number of different kinds of insects. The lecturer showed by statistics how much the country lost every year by the ravages of insects. The known amount of damage in money done last year was $2,000,000, and the unknown damage was probably as much more. The number of species of destructive insects was increasing every year, and the problem of warring against them was becoming more and more important. A large number of these insect pests were very formidable because as a rule they had no bird foes in this country. A study of insect life showed that they changed their tastes and habits and in time they left one plant and attacked another. As soon as they destroyed one kind of vegetable or fruit they fed on some other. This showed that eternal vigilance was the price of good harvests. A few years ago California was absolutely free from injurious insects, while now that State is infested as much as any other. All insects had their foes and the reason why these scourges came often in epidemics and stopped as suddenly was that these foes to insect life were working all the time. A knowledge of these insect foes, both natural and artificial, was absolutely necessary to the farmer and fruit-grower. A knowledge of the habits and life of insects was also necessary so that the best means of exterminating the pests could be learned. Experimenting on the different ways of getting rid of insects should be encouraged and money should be expended in carrying on experiments. Economic Entomology should be studied by all persons who expect to succeed in fruit-growing and farming.

ROLL OF MEMBERS

OF THE

WORCESTER COUNTY HORTICULTURAL SOCIETY.

By the term "Date," it is meant to comprise all the accessions of members from the original foundation of the Society. Where no numerals appear in that column, it is to be understood that the members, opposite whose names there are no figures, were entered upon the Roll of the Society previous to and coeval with the "List of Members," which was published in the "Transactions of The Worcester County Horticultural Society for the years 1852 and 1853."

Those members whose names are marked with a star (*) are dead.

A.

Date.	*Name.*	*Residence.*
	Adams, R. W.	Barre.
	Aldrich, Paine*	Worcester.
	Allen, W. E.*	"
	Allen, Rev. George*	"
	Allen, Hon. Charles*	"
	Allen, Samuel*	"
	Allen, James Frank	"
	Armsby, J. M. C.*	"
	Angier, Roswell P.*	Toledo, Ohio.
	Allen, Silas*	Shrewsbury.
	Allen, Lucius S.*	Worcester.
	Allen, Jonas H.	Shrewsbury.
	Allen, Asa H.	"
	Allen, Rev. Joseph*	Northborough.
	Adams, Otis*	Grafton.
	Armsby, Lewis	Northbridge.
	Allen, Rev. T. P.*	Sterling.
1855	Allen, Alvan*	Worcester.
1855	Allen, Mrs. Mary Ann	"
1856	Allen, Benj. D.	"
1859	Aldrich, P. Emory	"
1866	Adams, George A.*	"
1866	Allen, Mrs. Charles L.*	"
1867	Adams, John C.	"
1867	Armsby, Miss Ella A.	"
1867	Armsby, George F.	"
1870	Abbott, Ebenezer E.	"
1870	Andrews, S. C.	"
1871	Allen, Miss Lizzie G.	"
1872	Ames Edwin	"
1876	Adams, John	"
1879	Arnold, Samuel A.	"
1880	Abbott, Rogers A.	"

B.

Date.	*Name.*	*Residence.*
	Bancroft, Timo. W.*	Worcester.
	Boland, Tobias*	"
	Bickford, William M.*	"
	Bigelow, Lewis*	"
	Bradley, Osgood*	"
	Bowen, George*	"
	Burnside, Saml. M.*	"
	Bancroft, Charles P.	"
	Bullock, Alexander H.*	"
	Brown, Albert*	"
	Barton, Hon. Ira M.*	"
	Brown, William*	"
	Barbour, William C.	"
	Blood, Oliver H., M. D.*	"
	Barnard, Ebenezer L.*	"
	Boyden, Joseph*	"
	Bowen, Ebenezer H.*	"
	Bigelow, Walter*	"
	Ball, Richard*	"
	Bartlett, Stephen*	"
	Barrows, William	"
	Burbank, John G.*	"
	Bates, George A., M. D.*	"
	Bowen, Charles*	"
	Bigelow, Walter, Jr.*	"
	Breck, Moses T.*	"
	Buffum, Benjamin	"
	Berry, Zebina E.*	"
	Bates, H. G.	"
	Barton, William S.	"
	Barnard, John*	"
	Baylies, A.*	"
	Brooks, A. J.	Harvard.

B.

Date.	Name.	Residence.
	Burbank, James L.*	Worcester.
	Barker, William*	"
	Bond, Joseph*	"
	Bond, Jeremiah E.	"
	Banister, Emory	"
	Blake, James B.*	"
	Bancroft, Mary C.	"
	Banning, E. M.*	"
	Butman, Benjamin*	"
	Butman, Sarah L.	"
	Bigelow, Walter R.*	"
	Beach, Lucius	"
	Briggs, Joseph*	"
	Blood, Mrs. O. H.	"
	Bigelow, Charles*	Grafton.
	Brigham, E. L.	"
	Barnes, Artemas*	Berlin.
	Bisco, Dwight*	Leicester.
	Bottomly, Thomas*	"
	Bottomly, Booth*	"
	Brummett, Luke*	"
	Burr, Heman M.*	"
	Brooks, John*	Princeton.
	Banks, Thomas S.	Brookline.
	Boynton, John*	Templeton.
	Bowman, Charles D.*	Oxford.
	Boyd, John*	Shrewsbury.
	Burt, Ellis*	Douglas.
	Batcheller, Elhanan*	Sutton.
	Bowman, Joseph*	New Braintree.
	Ball, D.	Spencer.
	Biscoe, Thos. C.	Grafton.
	Brigham, Charles	"
	Bates, Joseph N.*	Worcester.
	Babbitt, Pliny H.	Barre.
	Buckley, William T.*	Worcester.
	Bond, Thomas	North Brookfield.
	Burrage, Leonard	Leominster.
	Banister, Mrs. Emory*	Worcester.
1853	Burbank, George G.*	"
1853	Barnard, George A.	"
1853	Bangs, Mrs. Mary G.*	"
1853	Bemis, Merrick	"
1855	Billing, Aaron*	"
1855	Brooks, J. H.	"
1855	Boyden, John	"
1855	Bentley, Geo. W.	"
1855	Bryant, Mrs. E.	"
1856	Bigelow, George C.*	"
	Butman, George F.*	"
1858	Bull, Trumbull*	Grafton.
1859	Brown, Alzirus	Worcester.
1859	Ball, Phinehas	"
1860	Barnard, Mrs. E. L.	"
1860	Batchelder, Ezra D.*	N. Brookfield.
1862	Barton, George S.	Worcester.
1863	Burgess, Daniel S.	"
1863	Brown, Mrs. Jonas	Wilkinsonville.
1863	Bertody, Miss M. F.	Leicester.
1864	Barber, Miss Ruth E.	Worcester.
1864	Brown, Jonas*	Wilkinsonville.
1864	Brooks, Mrs. Chas. E.	Worcester.
1864	Banister, Miss Emma	"
1864	Burbank, Asa L.	"
1864	Barber, George	"
1865	Barber, Mrs. George	"

B.

Date.	Name.	Residence.
1865	Baker, Zephaniah	Worcester.
1865	Bigelow, Luther H.*	"
1865	Bent, Charles M.	"
1865	Brown, George A.	"
1865	Burbank, Mrs. George G.	"
1865	Burbank, Miss Carrie A.	"
1865	Burgess, Mrs. Danl. S.	"
1865	Bancroft, Mrs. Mary M.	"
1865	Bacon, Mrs. John E.*	"
1865	Barnard, Miss Caroline*	"
1865	Boyden, Elbridge	"
1866	Boswell, Mrs. Annie E.	"
1866	Bennett, Mrs. Sarah F.	"
1866	Brimhall, Silas J.	"
1866	Baker, Jacob	Dudley.
1866	Baker, Mrs. Jacob	"
1866	Barrows, A. Herbert	Worcester.
1866	Bennett, James	Leominster.
1866	Bachelor, Charles O.	Northbridge.
1866	Bachelor, Mrs. Chas. O.	"
1866	Belcher, Charles	Worcester.
1866	Brown, Miss Josie E.	Wilkinsonv'le.
1867	Ballard, John S.	Worcester.
1867	Bradley, Mrs. Osgood	"
1867	Barton, Mrs. Margaretta L. K.	Worcester.
1867	Bacon, John E.*	"
1867	Baker, Mrs. Z.	"
1867	Bigelow, Mrs. Luther H.*	"
1868	Bowker, Sewall H.*	"
1870	Baldwin, John S.	"
1870	Barber, Miss Isabella G.	"
1870	Bullock, Mrs. Alex. H.	"
1870	Bartlett, Mrs. Theodore H.*	"
1873	Barbour, Miss M. Jennie	"
1870	Bullock, Augustus G.	"
1870	Bullock, Miss Isabel H.	"
1870	Bullock, Miss Fanny	"
1871	Bush, William	"
1871	Bush, Mrs. Isaac	"
1871	Brown, Thomas	"
1871	Blake, Fred. A.	"
1872	Buck, Mrs. H. B.	"
1872	Bigelow, James W.	"
1872	Ballard, Harry	"
1874	Ballard, Edgar	"
1874	Brimhall, Mrs. Silas J.	"
1874	Bassett, D. H.	"
1874	Bruso, Elizabeth F.	"
1874	Bennett, A. H.	Holden.
1876	Bowker, Mrs. S. H.	Worcester.
1876	Ballou, A. A.	Grafton.
1871	Bemis, Daniel W.	Worcester.
1879	Brooks, Charles E.	"
1880	Ball, Rev. George S.	Upton.
1881	Blood, Jefferson L.	Worcester.
1882	Brooks, Walter F.	"
1882	Baldwin, Charles C.	"
1882	Babbitt, William E.	"
1883	Brierly, Joseph	"
1883	Brastow, James B.	"
1884	Blake, Mrs. C. L.	Rochdale.
1884	Bennett, Miss Carrie E.	Worcester.
1884	Brooks, Rev. Arthur A.	"
1884	Bartlett, E. A.	Shrewsbury.
1885	Bancroft, Isaac A.	Worcester.

C.

Date.	Name.	Residence.
	Clark, John F.*	Worcester.
	Chandler, George	"
	Child, Benjamin N.*	"
	Colton, Samuel H.*	"
	Chase, Anthony*	"
	Chapin, Lewis*	"
	Chamberlain, Thomas*	"
	Chickering, C. C.	"
	Chamberlin, Henry H.	"
	Coe, William*	"
	Conant, Edwin	"
	Chapin, Charles P.*	"
	Chenery, Horace*	"
	Coes, Loring	"
	Comins, D. B.*	"
	Chaffin, T. M.	"
	Curtis, Tyler P.	"
	Chapin, Henry*	"
	Colton, Mrs. S. H.	"
	Chase, Mrs. Anthony*	"
	Canfield, Mrs. P. S.	"
	Cross, William*	"
	Clark, William C.	"
	Culver, J. S.*	"
	Coes, Aury G.*	"
	Curtis, Albert	"
	Conklin, Henry W.*	"
	Champney, Samuel P.*	Grafton.
	Coleman, Charles C.*	Worcester.
	Cook, David W.	"
	Clark, Henry O.*	"
	Chamberlain, George A.*	"
	Cutting, Jonathan*	Templeton.
	Clapp, John*	Leicester.
	Craig, Leonard*	"
	Cheney, Leonard	Southbridge.
	Capron, William C.*	Uxbridge.
1854	Canfield, Miss P. W. S.	Worcester.
1855	Carter, Rufus	"
1855	Conant, Mrs. Elizabeth*	"
1855	Conant, Miss Elizabeth*	"
1856	Champney, Preston A.*	Sutton.
1856	Champney, Samuel G.*	"
1856	Champney, Susan A.	"
1857	Chase, William M.	Worcester.
1858	Chapman, Isham S.*	"
1862	Clark, John S.	"
1863	Crompton, George	"
1863	Comley, James	"
1863	Chase, Nehemiah B.	Wilkinsonv'le.
1863	Cross, Courtland H.	West Warren.
1863	Crane, Hosea*	Millbury.
1863	Clapp, Silas*	Worcester.
1864	Cushing, Rev. S. A.*	Shrewsbury.
1864	Cook, Sumner	Worcester.
1864	Currier, Augustus N.	"
1864	Chandler, Miss Fanny	"
1864	Chamberlin, Susan E.*	"
1864	Cook, Nathaniel H.	Bristol, Conn.
1865	Cutter, Calvin, M. D.*	Warren.
1865	Cook, William W.	Worcester.
1865	Curtis, Mrs. Joseph*	"
1865	Clapp, Mrs. Simeon	"
1865	Coes, Frank Loring R.*	"
1865	Chase, Charles A.	"
1865	Chase, Mrs. Charles A.*	"

C.

Date.	Name.	Residence.
1865	Clapp, Frederick A.	Worcester.
1867	Chamberlain, Mrs. Geo. A.	"
1867	Chase, Joseph*	"
1867	Claflin, John*	"
1867	Clarke, Josiah H.	"
1868	Coe, George F.	Grafton.
1869	Chase, Albert N.	"
1870	Cruickshanks, Geo.	Whitinsville.
1870	Chapin, Miss Annie T.	Worcester.
1871	Chapin, Mrs. Louisa	"
1872	Carpenter, L. S.	"
1872	Chamberlin, Mrs. H. H.	"
1872	Colton, Mary R.	"
1873	Chaffin, Oscar	"
1873	Church, Moses	"
1875	Coulson, John	"
1875	Chester, Miss Katie D.	"
1875	Cruickshanks, Mrs. Mary E.	Whitinsville.
1876	Coes, Mrs. F. L. R.	Worcester.
1876	Clark, George H.	"
1878	Colton, Samuel H.	Auburn.
1878	Coes, Chester E. B.	Worcester.
1879	Currier, Elizabeth Dickinson	"
1881	Copeland, Amasa A.	"
1883	Curtis, Mrs. James P.	"
1884	Cook, Herbert A.	Shrewsbury.
1884	Comins, Edward I.	Worcester.
1885	Chase, Mrs. H. M.	"

D.

Date.	Name.	Residence.
	Davis, Hon. John*	Worcester.
	Draper, William A.*	"
	Dorr, Enos*	"
	Darling, Loron	"
	Dickinson, William	"
	Davis, Hon. Isaac*	"
	Dewey, Francis H.	"
	Davis, John C. B.	"
	Darling, H. G.	"
	Draper, Edwin*	"
	Day, Jonathan*	"
	Davis, Samuel	"
	Daniels, F. H.*	"
	Dresser, George A.	"
	Dyer, Calvin	"
	Dunbar, Rufus D.*	"
	DeWitt, Hon. Alexander*	Oxford.
	DeWitt, Horace S.*	"
	Dowley, Levi A.*	"
	Davis, George C.*	Northborough.
	Daniels, Nathan*	Leicester.
	Denny, Henry A.	"
	Denny, Joseph A.*	"
	Denny, Nathaniel P.	Norwich, Ct.
	Denny, George*	Westborough.
	Dodge, Harvey	Wilkinsonville.

D.

Date.	Name.	Residence.
	Drake, Simeon A.	Sturbridge.
	Denny, Reuben S.*	Leicester.
	Davis, Henry G.	Millbury.
1854	Denny, Charles A.*	Leicester.
1854	Dwinnell, Leonard*	Millbury.
1854	Dana, John A.	Worcester.
1855	Daniels, George F.	Oxford.
1858	Dudley, P. Whitin*	Whitinsville.
1859	Dodge, Pickering*	Worcester.
	Dixie, Edmund F.*	"
1864	Desper, William E.	"
1864	Dadmun, Appleton*	"
1865	Dewey, Mrs. Sarah B.	"
1865	Dewey, Carrie Clinton*	"
1865	Dewey, Rosebud	"
1865	Davis, Edward L.	"
1865	Dodge, Thomas H.	"
1865	Dyer, Mrs. Calvin	"
1865	Dyer; Miss Hattie L.	"
1865	Dodge, Mrs. Benjamin J.	"
1866	Driscoll, Dennis*	"
1867	Draper, James	"
1867	Draper, Mrs. James	"
1867	Draper, Mrs. Edwin*	"
1869	Davis, Alfred	"
1869	Dudley, George J.	Sutton.
1869	Dutcher, Frank J.	Hopedale.
1870	Dawson, Thomas A.	Worcester.
1870	Drury, Arthur H.	"
1871	Davis, Joseph E.	"
1873	Dawson, Mrs. Thomas A.	"
1875	Dana, Mrs. John A.	"
1881	DeLand, Mrs. E. H.	"
1883	Darling, William	"

E.

Date.	Name.	Residence.
	Earle, Edward*	Worcester.
	Estabrook, James*	"
	Earle, John Milton*	"
	Earle, Mrs. Sarah H.*	"
	Earle, Mrs. Edward	"
	Earle, Timothy K.*	"
	Earle, Oliver K.*	"
	Earle, Thomas*	"
	Estey, James L.	"
	Earle, Anna B.	"
	Estabrook, Joseph*	Royalston.
	Edwards, John F.	Boston.
1855	Estabrook, James E.	Worcester.
1858	Eldred, Frederick A.*	"
1859	Estabrook, G. W.	Grafton.
1862	Eames, William	Worcester.
1864	Eames, Miss Mary R.	"
1864	Ellsworth, Emory A.	Barre.
1865	Estabrook, George H.	Worcester.
1865	Estabrook, Daniel F.	"
1865	Earle, Miss Sarah F.	"

E.

Date.	Name.	Residence.
1866	Earle, Stephen C.	Worcester.
1866	Eastman, Miss Emma	"
1867	Estabrook, Mrs. George H.	"
1867	Emerson, Mrs. Jason*	Millbury.
1867	Eaton, Thomas B.	Worcester.
1867	Eaton, Mrs. Charlotte M.	"
1868	Ellsworth, Samuel*	"
1868	Eaton, Charles B.	"
1871	Earle, William H.	"
	Estabrook, Arthur E.	"
1873	Ellsworth, J. L.	"
1874	Earle, Mrs. Wm. H.	"
1872	Eastman, William H.	"
1881	Eames, Luther R.	"

F.

Date.	Name.	Residence.
	Foster, Alfred D.*	Worcester.
	Fisher, Maturin L.*	"
	Fox, Lemuel J.*	"
	Flagg, David*	"
	Foster, Samuel B.*	"
	Fox, William B.*	"
	Flagg, Joel*	"
	French, Hiram*	"
	Flagg, Benjamin*	"
	Fuller, Elisha*	"
	Fox, William B. Jr.*	"
	Freeland, Charles W.*	"
	Flagg, Samuel, M. D.	"
	Flagg, Marshall*	"
	Field, John*	"
	Fitch, Ezra*	"
	Foster, Hon. Dwight*	"
	Fox, Miss N. Jane	"
	Flagg, Montraville	Boylston.
	Flagg, Nahum	"
	Forbush, Calvin W.*	Grafton.
	Forbush, Curtis	California.
	Fitch, Dana H.*	Leicester.
	Flagg, Abijah*	Boylston.
	Flagg, Stephen*	"
	Flagg, Benjamin*	Shrewsbury.
	Fairbanks, Orrin	Westborough.
	Felton, Oliver C.	Brookfield.
	Fay, Peter	Southborough.
	Forbush, Jonathan*	Bolton.
1854	Farnum, Joseph S.*	Worcester.
1855	Falconer, James D.	"
1856	Foster, Stephen S.*	"
1857	Ferguson, Samuel B.	Westborough.
1858	Ferguson, George A.	"
1859	Ferguson, Henry C.	"
1863	Firth, Abram	Boston.
1863	Foster, Adams*	Holden.
1863	Flint, Mrs. E. H.*	Leicester.
1863	Fayerweather, John A.	Westboro.
1863	Fiske, Edward R.	Worcester.

F.

Date.	Name.	Residence.
1865	Fiske, Mrs. Edward R.*	Worcester.
1865	Farnum, Miss Ann Eliza	"
1865	Farnum, Miss Mary J.	"
1865	Fox, Miss Annie R. S.*	"
1866	Fuller, Mrs. James A.	"
1866	Francis, George E., M. D.	"
1866	Fisk, Miss Lydia C.	"
1866	Foster, Miss Alla W.	"
1866	Fox, Miss Maria	"
1867	Field, Samuel T.*	"
1867	Flagg, Mrs. Ebenezer	"
1869	Fisher, Simon E.	"
1870	Fisher, Mrs. Jennie M.	"
1871	Flagg, Mrs. Marshall	"
1872	Foster, Charles T.	Holden.
1874	Fitts, Mrs. D.	Oxford.
1874	Francis, Miss Elizabeth K.	Worcester.
1877	Fish, Henry C.	Worcester.
1881	Fish, Jonathan	"
1881	Fiske, David L.	Grafton.

G.

Date.	Name.	Residence.
	Green, John, M. D.*	Worcester.
	Gould, Hiram*	"
	Greenleaf, Frederick W.*	"
	Goodnow, E. D.*	"
	Goulding, Henry*	"
	Gates, Simon S.*	"
	Gould, Erasmus*	"
	Greenleaf, William*	"
	Gale, Frederick W.*	"
	Gilbert, Joseph A.	"
	Gates, John*	"
	Goddard, Isaac*	"
	Goddard, S. B. I.	"
	Green, James*	"
	Green, William N.*	"
	Green, Meltiah B.	"
	Gilbert, Peregrine B.	"
	Green, Samuel F.*	"
	Gorham, Chester*	Barre.
	Gray, John Jr.*	Worcester.
	Goodrich, Jesse W.*	"
	Gay, Wilkes	"
	Gregory, Joseph E.*	"
	Goss, William*	"
	Grout, Jonathan*	"
	Garside, James M.*	"
	Gill, George W.*	"
	Griggs, Joseph*	"
	Greenleaf, Sarah L.	"
	Green, Mrs. M. B.	"
	Greenleaf, Mrs. Maria J.*	"
1854	Goddard, Benjamin*	"
1854	Goddard, John D.	Shrewsbury.

G.

Date.	Name.	Residence.
1856	Greenleaf, Dolly A.	Worcester.
1856	Goddard, Silas	"
1859	Grout, J. Willie*	"
1860	Gleason, Charles W.	Holden.
1864	Green, Timothy Ruggles*	Worcester.
1864	Goodnow, Edward A.	Worcester.
1865	Goodell, Arthur A.*	"
1865	Goddard, Dorrance S.	"
1865	Gray, William L.*	"
1865	Gordon, Miss Elizabeth G.	"
1865	Gunderson, Christopher*	"
1865	Gilbert, Mrs. Chas. W.*	"
1865	Grout, Miss Lizzie	"
1865	Glazier, Henry	"
1865	Garfield, Moses D.	Millbury.
1866	Gorham, Miss Mary E.	Worcester.
1866	Geer, George*	"
1866	Geer, Mrs. George	"
1866	Gates, Otis A.	"
1867	Gleason, Jonathan R.	"
1867	Goddard, Mrs. D. S.	"
1867	Green, Miss Julia E.	"
1867	Gleason, Joseph H.	Holden.
1867	Gordon, Albert A.	Worcester.
1867	Gordon, Mrs. Albert A.	"
	Gerould, Mrs. James H.	"
1871	Green, Samuel S.	"
1872	Gilbert, Charles W.	"
1874	Gibbs, Mrs. Mary E.	"
1874	Goodwin, Charles	"
1879	Greenwood, Charles	"
1883	Gould, Abram K.	"
1883	Goddard, Mrs. Mary S.	"
1884	Gates, Harvelin T.	"

H.

Date.	Name.	Residence.
	Harris, Clarendon*	Worcester.
	Heard, Nathan*	"
	Hooper, William R.	"
	Heywood, Daniel*	"
	Heywood, Benjamin F.*	"
	Haven, Samuel F.*	"
	Howland, S. A.*	"
	Harrington, Samuel*	"
	Howland, Henry J.	"
	Hovey, William*	"
	Hill, Rev. Alonzo*	"
	Hamilton, Charles A.*	"
	Hadwen, Charles*	"
	Howe, Henry P.*	"
	Hammond, John*	"
	Harrington, F. Jr.	"
	Hawes, Russell L.*	"

H.

Date.	Name.	Residence.
	Hill, C. H.	Worcester.
	Harding, Samuel D.	"
	Hall, Enoch	"
	Hadwen, O. B.	"
	Hemenway, Edward H.*	"
	Hale, Rev. Edward E.	"
	Harlow, A. R.	"
	Hathaway, Samuel	"
	Hardon, Benjamin L.*	"
	Holmes, Pitt*	"
	Hill, J. Henry	"
	Hartshorn, George F.	"
	Hall, Franklin	"
	Harris, O. F.	"
	Hoar, George F.	"
	Hartshorn, Jonas*	"
	Hartshorn, Calvin L.	"
	Hadwen, Mrs. Mary R.	"
	Henderson, James G.*	"
	Harlow, Abner*	Shrewsbury.
	Heard, Samuel	Leicester.
	Henshaw, H. G.	"
	Hatch, Cheney*	"
	Holman, Parley*	"
	Haven, Luther*	Boston.
	Hill, Augustus G.*	Harvard.
	Hapgood, Lemuel B.*	Shrewsbury.
	Hunt, S. W.	"
	Holbrook, Cyrus	Sterling.
	Harrington, Stephen	Millbury.
	Harrington, D. B.	"
	Hall, Charles	"
	Hale, Moses	Harvard.
	Hale, William	Sutton.
	Heywood, Augustus	Grafton.
	Hastings, C. C. P.*	Mendon.
	Hill, Washington*	Spencer.
	Hartwell, Geo. W.	Oxford.
	Holman, Amory*	Bolton.
	Hubbard, R. B.*	Sunderland.
	Hastings, Solon S.	Princeton.
1854	Hacker, W. Alfred*	Worcester.
1854	Harrington, Adam L.*	"
1855	Harris, Mrs. Clarendon*	"
1856	Hartshorn, Mrs. Isabella F.	"
1858	Hunt, Francis W.	East Douglas.
1860	Hartshorn, John W.	Worcester.
1862	Heywood, Samuel R.	"
1862	Hall, Salmon D.	Grafton.
1862	Harris, Gideon*	Worcester.
1862	Harrington, Chauncey G.	"
1863	Heywood, William H.	"
1863	Hamilton, C. Willard	"
1863	Hammond, Parley*	"
1864	Huntington, Rev, Wm. R.	"
1864	Heywood, Miss Abby S.	"
1864	Hadwen, William E.	"
1864	Hadwen, Charles, Jr.	"
1864	Healey, Michael	"
1864	Howe, Mrs. E. M.	Sterling.
1864	Howe, William	Millbury.
1864	Hubbard, Cyrus K.	Worcester.
1864	Heywood, Miss Emma H.	"
1864	Hadwen, Miss Amie B.	"
1865	Hascall, Jefferson	Shrewsbury.
1865	Hill, Mrs. J. Henry	Worcester.

H.

Date.	Name.	Residence.
1865	Heald, Jonas	Worcester.
1865	Howe, Church	Holden.
1865	Hunt, Addison A.	Shrewsbury.
1865	Hemenway, Daniel M.	Millbury.
1865	Houghton, Alba, Jr.	Worcester.
1865	Harrington, Halloway	"
1865	Hamilton, Mrs. C. Willard	"
1865	Haven, Edwin*	"
1866	Hoyle, Miss Mary Ann	Millbury.
1866	Holbrook, William D.*	Worcester.
1866	Holman, Mrs. Henrietta A.	"
1866	Holbrook, Mrs. William D.	"
1866	Holman, Mrs. William Y.	"
1867	Hancock, Frederick	"
1867	Hartwell, Isaac B.	Oxford.
1867	Haskins, D. W.	Worcester.
1867	Hatch, O. L.	"
1867	Hatch, Mrs. O. L.	"
1867	Hutchinson, Gerry*	"
1867	Hutchinson, Mrs. Gerry	"
1867	Hapgood, L. R.	"
1867	Hillard, Mrs. John	"
1867	Harrington, Mrs. Stephen	"
1867	Harris, Mrs. Gideon	"
1867	Harrington, Frank W.	"
1868	Holman, William Y.*	"
1869	Hancock, Miss Etta	"
	Hammond, Mrs. Henry K.	"
1870	Hicks, Samuel P.	"
1870	Hapgood, Joab	Shrewsbury.
1870	Harlow, Wm. T.	Worcester.
1870	Harris, John A.	Rutland.
1871	Hamilton, Edward B.	Worcester.
1871	Hammond, Henry K.*	"
1871	Hamilton, Miss Fanny M.*	"
1871	Harris, Warren	Millbury.
1872	Hastings, Joseph E.	Worcester.
1874	Hartshorn, Mrs. C. L.	"
1874	Hovey, Charles H.	Cambridgeport.
1874	Hadwen, Mrs. O. B.	Worcester.
1875	Hackett, William H.	"
1880	Hixon, Adin A.	"
1880	Hixon, Mrs. A. A.	"
1880	Hall, Mrs. C. S.	"
1881	Houghton, C. C.	"
1882	Henderson, Mrs. A. E.	"
1884	Hoyt, Mrs. Henry A.	"

J.

Date.	Name.	Residence.
	Jaques, George*	Worcester.
	Johnson, Asa T.	"
	Johnson, Henry F., M. D.	"
	Johnson, Eli	"
	Jackson, William*	"
1854	James, Rev. Horace*	"
1854	Johnson, William*	"
1855	Johnson, Charles*	Northborough.
1855	Johnson, Joshua J.*	"

J.

Date.	Name.	Residence.
1855	Johnson, Oliver*	Sterling.
1856	Jaques, John C.*	Worcester.
1856	Jewett, Darwin E.	Westborough.
1865	Jones, Willard*	Worcester.
1867	Johnson, John F.	Northborough.
1867	Jones, Rev. J. D. E.	Worcester.
1867	Johnson, Ida W.	"
1867	Johnson, Wm. H.	Northborough.
1870	Jillson, Clark	Worcester.
1870	Jenkins, Curtis	Worcester.
1874	Jewett, Ebenezer	"
1875	Jaques, Benjamin C.	"
1880	Jones, Herbert A.	"

K.

Date.	Name.	Residence.
	Kettell, John P.*	Worcester.
	Kinnicutt, Thomas*	"
	Knox, Samuel A.	"
	Knapp, Joel	Sutton.
	Kilburn, Eli	Sterling.
	Kinnicutt, Francis H.*	Worcester.
	Kendall, Hon. Joseph G.*	"
	Knights, Jonathan H.*	"
	Keith, Timothy*	"
1854	Kinnicutt, Eliza M.	"
1854	Kinnicutt, Rebecca N.	"
1857	Kent S. W.*	"
1858	Keyes, W. W.	West Boylston.
1865	Kimball, Mrs. Sarah A.	Worcester.
1865	Kelley, Dr. Francis H.	"
1866	Keyes, Charles A.	"
1866	Keith, Henry R.*	"
1867	Kraft, Michael*	Leicester.
1867	Kinney, Mrs. W. P.	Worcester.
1867	Kinney, Frank J.	"
1868	Knowles, Lucius J.*	"
1868	Knox, S. Harrison	"
1869	Kinney, Wm. P.	"
1870	Kendall, Edward	"
1870	Kinnicutt, Leonard P.	"
1873	Kinnicutt, Mrs. Francis H.	"
1875	Kendall, Mrs. George H.	"
1880	Kinney, Mrs. Ann M. F.	"

L.

Date.	Name.	Residence.
	Lincoln, William*	Worcester.
	Lincoln, John W.*	"
	Lincoln, Gov. Levi*	"
	Lakin, Ansel*	"
	Lovell, Joseph	"

L.

Date.	Name.	Residence.
	Leonard, Samuel S.*	Worcester.
	Lincoln, D. Waldo*	"
	Lincoln, Edward W.	"
	Lazell, Warren*	"
	Lincoln, William S.	"
	Lamson, William C.*	"
	Lonergan, Patrick	"
	Lincoln, Mrs. D. Waldo*	"
	Lincoln, Miss G. De V.*	"
	Lincoln, Miss Mary W.	"
	Lovell, A. Beaman	"
	Lincoln, Miss Frances M.	"
	Lamb, Josiah Q.*	Leicester.
	Loring, John	"
	Lamson, H. O.	West Brookfield.
	Leach, James	Westborough.
	Leland, Joshua W.*	Grafton.
	Longley, James	Boston.
	Lovell, Mrs. Mary E.	Worcester.
1854	Lee, David*	Barre.
1854	Lee, Henry A.	Worcester.
1854	Lincoln, William*	"
1855	Lamb, Edward*	"
1855	Lovell, Joseph C.	West Boylston.
1855	Lee, George H.	Barre.
1856	Lovering, Samuel F.*	Worcester.
1856	Lincoln, Levi, 2d	"
1859	Leland, Horace*	Sutton.
1860	Lincoln, Waldo	Worcester.
1861	Lovell, Albert A.	"
1863	Lovell, Addison	West Boylston.
1864	Lincoln, John Waldo	Worcester.
1864	Lincoln, Annie Marston	"
1864	Lincoln, Marian Vinal	"
1864	Lee, Mrs. Dorcas B.	
1865	Lincoln, Mrs. Kate Von Weber	"
1865	Lincoln, Marston	"
1865	Lewis, Benjamin	
1865	Lamb, Thomas M.*	"
1865	Lewisson, Louis	"
1866	Lovell, John D	"
1867	Lynam, Mrs. John	"
1867	Lamb, Mrs. T. M.	"
1868	Lincoln, Adeline Sever	"
1868	Lovell, Cyrus A.	"
1870	Lamb, Alice B.	"
1870	Lovell, Miss Abby M.	W. Boylston.
1870	Lincoln, Helen	Worcester.
1871	Loomis, H. F.*	"
1871	Lange, Hermann F. A.	"
1872	Lincoln, Pelham Winslow	"
1874	Lovell, Mrs. C. Augusta*	"
1874	Lincoln, Mrs. William S.	"
1874	Lincoln, Mrs. Levi	"
1874	Lovell, Mrs. Jane M.	W. Boylston.
1875	Lincoln, Winslow S.	Worcester.
1875	Lincoln, Miss Kate Von W.	"
1881	Lovell, Mrs. S. L. C.	"
1884	Lovell, Henry	"

M.

Date.	Name.	Residence.
	Merrifield, Alpheus*	Worcester.
	Merrick, Francis T.*	"
	Miller, Henry W.	"
	Messenger, David S.	"
	Merrifield, F. N.	"
	Merrifield, Ann B.*	"
	Merrifield, William T.	"
	Merrifield, Catharine A.*	"
	Mason, L. L.*	"
	Maynard, William G.	"
	Morse, James C.*	"
	Merrifield, A. M.*	"
	Mason, Joseph	"
	Miles, Charles M.	"
	Miller, S. P., M. D.*	"
	Marsh, Alexander	"
	Mason, John C.*	"
	Merrick, Sarah R.*	"
	Merrifield, Mrs. Wm. T.	"
	Messenger, Elizabeth F.	"
	Miller, Ruth Ann	"
	Miller, Alice M.	"
	Merrifield, William F.	"
	Merriam, Thomas*	"
	Moore, David T.*	Boylston.
	Morse, Adolphus*	Rochester, N. Y.
	May, Samuel, Jr.*	Leicester.
	Murdock, Joshua, Jr.*	"
	McFarland, H.	Framingham.
	Moore, J. H.	Charlton.
	Merriam, Isaac S.	Auburn.
	McLellan, James	Sutton.
	Moen, Philip L.	Worcester.
1854	Merrifield, Henry K.	"
1854	Metcalf, Caleb B.	"
1855	Moore, Ashley	"
1857	Mills, Isaac*	"
1857	Merriam, N. K.	Grafton.
1859	Merrifield, Maria J.*	Worcester.
1859	Merrifield, Harriet	"
1859	Marble, F. M.	Grafton.
1862	Morse, Edwin	Worcester.
1863	Mascroft, William D.	Northbridge.
1863	Messenger, Miss Mary A.	Worcester.
1864	Mower, Miss Caroline C.	Worcester.
1865	Marsh, Henry A.	Worcester.
1865	Merrifield, Mrs. Lucy A.	"
1865	Morgan, Charles H.	"
1865	Messenger, Miss Susie S.	"
1865	Madaus, Charles	"
1865	Messenger, Frank Langdon	"
1866	Marble, Henry	Millbury.
1866	Morey, Oliver S.	Shrewsbury.
1866	McPherson, Mrs. Elizabeth W.	Worcester.
1867	Morse, Mrs. C D.	Millbury.
1867	Martin, Miss Mary W.	Worcester.
1867	Morse, Mrs. Mason H.	"
1867	Murphy, John	"
1870	McFarland, Edwin D.	"
1871	Morrison, Stephen	"
1871	Morey, Mrs. L.	Shrewsbury.
1872	Midgeley, John	"
1872	McIntire, Benjamin F.	Millbury.

M.

Date.	Name.	Residence.
1872	Macullar, Addison	Worcester.
1866	Moen, Mrs. Maria S. G.	"
1873	Morse, C., Jr.	"
1874	Mascroft, Henry C.	"
1880	Morse, Miss Fanny C.	"
1881	March, David T.	Millbury.
1882	Moore, Miss Sarah A.	Worcester.
1882	Marble, Edward F.	"
1884	Merrifield, Mrs. F. H.	"
1886	McWilliams, Geo.	Whitinsville.

N.

Date.	Name.	Residence.
	Newcomb, Henry K.*	Worcester.
	Nelson, Jonathan*	"
	Newton, Rejoice*	"
	Nash, Charles	"
	Newton, John C.	"
	Nelson, Rev. John*	Leicester.
	Newton, Wm., M. D.	Worcester.
1854	Nourse, Benj. B.*	Westborough.
1863	Nelson, Thomas L.	Worcester.
1863	Norcross, Thomas R.	Shrewsbury.
1864	Nichols, E. W.	Worcester.
1865	Newton, Mrs. James H.	Holyoke.
1866	Nichols, Mrs. C. P.	Worcester.
1867	Newton, Mrs. John C.*	"
1867	Newell, Mrs. Ann M.	Boylston.
1867	Newton, Miss Sarah E.	Millbury.
1872	Nelson, Mrs. Thomas L.	"
1880	Nelson, Miss Louisa B.	Worcester.
1883	Neilson, John	"

O.

Date.	Name.	Residence.
	Oliver, Edward H.*	Worcester.
1863	Osgood, James H.*	"
1870	Olin, Matthias*	Springfield.
1866	Onthank, J. M.*	
1879	Overend, Walter E.	Worcester.

P.

Date.	Name.	Residence.
	Paine, Frederick W.*	Worcester.
	Paine, Henry*	"
	Paine, Charles*	"
	Paine, Gardiner*	"
	Pratt, Joseph	"

P.

Date.	Name.	Residence.
	Phillips, Moses D.*	Worcester.
	Pond, John F.*	"
	Pickford, J. K. L.*	"
	Phelps, Horatio	"
	Paine, J. W.	"
	Perry, Samuel*	"
	Park, John*	"
	Pratt, Jotham B.*	"
	Perkins, Joseph*	"
	Phelps, J. Emory	"
	Prentiss, Charles G.*	"
	Putnam, F. H.*	"
	Pratt, Sylvanus*	"
	Prentice, Henry*	"
	Paine, William R.*	"
	Piper, William*	"
	Putnam, Charles L.*	"
	Paine, Ann E.	"
	Paine, Mrs. Charles*	"
	Paine, Anna C. S.*	"
	Pratt, Sumner	"
	Pratt, W. W.*	"
	Parker, Grenville*	"
	Putnam, S. P.	"
	Partridge, Joseph L.	Boston.
	Patrick, John*	Warren.
	Parmenter, Silas	Westborough.
	Perrin, Payson H.	"
	Phelps, Henry R.	"
	Pierce, Charles A.	Grafton.
	Potter, Hervey K.*	"
	Porter, Joshua, Jr., M. D.*	North Brookfield.
	Pierce, Thomas	Spencer.
	Pope, Jonathan A.	Millbury.
	Perry, Dexter H.*	Worcester.
	Peck, Frederick M.	"
	Parkhurst, Nathaniel R.*	"
1854	Paine, Nathaniel	"
1854	Partridge, Elbridge G.	"
1854	Phelps, Henry	"
1854	Proctor, Edward	Spencer.
1855	Paine, Miss Alice W.	Worcester.
1855	Paine, Miss Elizabeth F.	"
1856	Peaslee, Abram*	"
1856	Patch, Whipple W.*	"
1856	Pratt, Daniel R.	"
1857	Phillips, Luther	"
1862	Phillips, Ivers	"
1863	Pond, Lucius W.	"
1863	Pratt, Charles B.	"
1863	Phelps, George E.	"
1863	Pinkham, James S.*	"
1864	Phillips, Miss Marianne	"
1864	Pike, James T.*	"
1864	Pierce, Mrs. Charles L.*	"
1865	Paine, Mrs. D. H.	"
1865	Pratt, Mrs. Sumner	"
1865	Pratt, Miss Emma A.	"
1865	Read, Miss Sarah E.	"
1865	Pratt, Frederick S.	"
1865	Pratt, Edward R.*	"
1865	Pierce, James R.*	"
1865	Phelps, Mrs. Sallie	"
1865	Phelps, Miss Sarah D.	"
1865	Phelps, Miss Mary R.	"

P.

Date.	Name.	Residence.
1865	Phelps, Miss Deborah	Worcester.
1865	Phelps, Miss Helen E.	"
1865	Peckham, George R.*	"
1866	Parsons, Mrs. Solomon*	"
1867	Parsons, Mrs. Samuel B.	"
1867	Parker, Mrs. Aaron	"
1867	Piper, George M.	"
1867	Parker, Henry L.	"
1867	Pierce, Charles L.	"
1867	Pickett, Mrs. Josiah	"
1867	Phelps, John E.	"
1867	Peckham, Mrs. George R.	"
1868	Porter, Samuel A.	"
1869	Putnam, Archelaus	Holden.
1870	Perry, S. Payson	Auburn.
1871	Palmer, Addison	Worcester.
1873	Putnam, Samuel	"
1874	Parker, Henry L., Jr.	"
1874	Phelps, Mrs. Joseph E.	"
1874	Pierce, George M.	"
1875	Pierce, John M.	W. Boylston.
1875	Pollard, Edward C.	Worcester.
1875	Pratt, Samuel A.	"
1875	Parker, Mrs. C. E.	Holden.
1876	Phelps, William E.	Worcester.
1878	Phelps, Mrs. Henry	"
1878	Peters, John L.	"
1879	Parker, Charles E.	Holden.
1880	Pierce, James E.	W. Boylston.
1882	Perry, Miss Mary S.	Worcester.
1884	Putnam, Samuel H.	"
1884	Powers, Joseph W.	"
1884	Pond, Willard F.	"

Q.

Date.	Name.	Residence.
1878	Quimby, H. M., M. D.	Worcester.

R.

Date.	Name.	Residence.
	Rice, George T.*	Worcester.
	Richardson, George W.	"
	Richardson, Mrs. George W.*	"
	Rice, Darius*	"
	Russell, George W.	"
	Rice, Josiah*	"
	Rice, Thomas H.	"
	Reed, Benjamin*	"
	Rice, Sewall*	"
	Ramsay, O. A.	"
	Ripley, John C.*	"
	Rice, E. B.*	"
	Robbins, Charles B.	"
	Rice, George M.	"
	Rockwood, Adams	"

R.

Date.	Name.	Residence.
	Rice, Mrs. George T.	Worcester.
	Richardson, Anna M.	"
	Rice, Francis B.	"
	Randall, Abraham G.*	Millbury.
	Rice, Abbott B.*	Northborough.
	Rice, Danforth	Leicester.
	Rogers, Edward*	Webster.
1856	Ripley, Mrs. Sarah P. T.*	Worcester.
1856	Ruggles, Draper*	Worcester.
1856	Rice, George T.*	"
1856	Rice, Mrs. George T.*	"
1862	Reedy, John	"
1863	Richardson, Charles*	"
1863	Richardson, Miss Fannie A.	"
1865	Rogers, Israel M.	"
1865	Richardson, Mrs. Charles	"
1866	Reed, L. R. S.*	"
1866	Robinson, James*	"
1866	Rice, Miss S. Elizabeth	"
1866	Robinson, Mrs. James	"
1867	Rice, Ezra B.	"
1867	Rice, Mrs. J. Marcus	"
1870	Rogers, James S.	"
1871	Richardson, Clifford	"
1872	Rice, Peter*	"
1874	Rice, Miss Louisa A.	"
1875	Rogers, George W.*	"
1876	Reed, Henry, Jr.	"
1879	Rice, George Calvin	"
1880	Rogers, Mrs. Nellie F.	"
1880	Rice, Abner	"
1881	Record, S. H.	"
1881	Record, Mrs. S. H.	"
1881	Rich, Mrs. Annie P.	"
1881	Rich, George H.	"
1883	Reynolds, Henry T.	"
1884	Rice, Alden	"

S.

Date.	Name.	Residence.
	Salisbury, Hon. Stephen*	Worcester.
	Shepherd, James*	"
	Smith, Chandler*	"
	Stowell, David D.*	"
	Sweetser, Rev. Seth*	"
	Stone, Daniel*	"
	Stowe, Elijah*	"
	Shepherd, James, Jr.	"
	Stone, Aaron, Jr.	"
	Stowell, L. W.*	"
	Scott, Samuel B.*	"
	Sargent, Joseph, M. D.	"
	Southwick, Edward*	"
	Story, Simeon N.	"
	Spooner, Moses*	"
	Stoddard, Elijah B.	"
	Scott, David, Jr.*	"
	Stebbins, Edward S.	"
	Smith, Lewis*	"

S.

Date.	Name.	Residence.
	Sargent, Henry, M. D.*	Worcester.
	Salisbury, Mrs. S.*	"
	Smalley, Rev. Elam*	"
	Stone, Samuel V.*	"
	Smith, Lemuel*	"
	Smith, Samuel	"
	Selby, Samuel H.*	"
	Southgate, Isaac*	Leicester.
	Sargent, Joseph D.*	"
	Sargent, John*	"
	Stone, Abijah*	"
	Sargent, Homer E.	"
	Slater, George B.*	Webster.
	Sibley, Jonas L.*	Sutton.
	Slocomb, Horatio*	Saundersville.
	Snow, Henry*	Shrewsbury.
	Stone, Job C.*	"
	Slocomb, J. W.*	Grafton.
	Smith, Asa F.	"
	Sanford, Rev. William*	Boylston.
	Stone, Joseph	Westborough.
	Southworth, Chas.	Northborough.
	Sibley, D. B.	Millbury.
	Sumner, Sullivan	Milford.
	Smith, R. R.	Lynn.
	Symmes, C. T.	Lancaster.
1854	Sears, Sylvanus	Worcester.
1854	Smith, Larkin*	"
1854	Stowe, Martin*	"
1855	Snow, Winsor N., M. D.	"
1855	Strong Francis	"
1856	Smith, L. F.	Northbridge.
1856	Sprague, A. B. R.	Worcester.
1856	Stiles, Francis, Jr.	"
1860	Stone, Josiah G.*	Shrewsbury.
1862	Swett, William O.	Worcester.
1862	Stone, Timothy S.*	"
1862	Sawyer, Ezra	"
1863	Stearns, Edwin*	Millbury.
1863	Struthers, William C.*	"
1863	Slocum, George F.*	Grafton.
1863	Swan, Elllott	Worcester.
1864	Searles, Miss Lydia A.	Wilkinsonville.
1864	Sawyer, Stephen	Worcester.
1865	Salisbury, Stephen, Jr.	"
1865	Scofield, James M.*	"
1865	Smith, Charles W.*	"
1865	Scott, Mrs. David	"
1865	Sumner, Mrs. George	"
1865	Sumner, George	"
1865	Smith, Miss Harriett A.	"
1865	Smythe, W. A. S.*	"
1865	Smith, J. Sargent	Leicester.
1866	Scott, Miss Alice	Worcester.
1866	Sears, Alden H.	"
1866	Smith, James A.	"
1866	Smith, Sidney	"
1866	Shaw, Mrs. John B.	"
1867	Sturtevant, Mrs. Harvey	"
1867	Smith, Miss Sarah M.	"
1867	Streeter, John P.	"
1867	Stone, Mrs. Lottie J.	"
1867	Stone, Miss L. Jennie*	"
1867	Stone, Miss Mary A.	"
1867	Stone, Miss Lizzie	"

S.

Date.	Name.	Residence.
1867	Stone, George H.	Worcester.
1867	Sanders, Eri	"
1868	Skinner, Miss Kate J.	"
1868	Smith, Woodbury C.	"
1871	Stowe, Luther	"
1871	Spinney, George	"
1871	Southwick, Thomas	Leicester.
1872	Schaff, Mrs. Sarah D.	"
1872	Stiles, Frederick G.	Worcester.
1872	Smith, Chas. Henry	Millbury.
1874	Southwick, Mrs. Thomas	Leicester.
1874	Stiles, Mrs. Fred'k G.	Worcester.
1874	Staples, Samuel E.	"
1874	Searles, David H.	Sutton.
1875	Smith, Stephen H.	W. Boylston.
1877	Stone, Charles W.	Worcester.
1879	Smith, Miss J. F	"
1879	Smith, Miss Mary A.	"
1880	Smith, Charles D.	"
1881	Smith, Thomas	"
1882	Sargent, Mrs. Wallace E.	"

T.

Date.	Name.	Residence.
	Thomas, Hon. Benjamin F.*	West Roxbury.
	Tolman, Albert	Worcester.
	Tead, Nathaniel*	"
	Taft, Putman W.*	"
	Tower, Horatio N.*	"
	Taft, George C.	"
	Trumbull, George A.*	"
	Tainter, Daniel*	"
	Thurber, Charles	"
	Tourtellott, S.*	"
	Tucker, Thomas*	"
	Taft, Stephen*	"
	Thomas, Mrs. B. F.*	"
	Olney, Mrs. Richard	"
	Tenney, Daniel*	Sutton.
	Taylor, Samuel	"
	Thayer, Joseph*	Uxbridge.
	Taft, Bezaleel*	"
	Torrey, Samuel D.*	Millbury.
	Taylor, Thomas	Dudley.
	Taft, Lewis S.	Uxbridge.
	Tucker, Augustus*	Worcester.
1854	Thurston, Joseph*	"
1854	Tiffany, P. Dexter*	"
1855	Thurston, David C.*	"
1855	Thurber, Mrs. M. F.	"
1856	Tiffany, Mrs. H. K.	"
1856	Trumbull, Miss Susan	"
1856	Tiffany, John K.	"
1856	Thomas, Benjamin F., Jr.*	"
1858	Thompson, William C.*	"
1859	Tourtellott, S. D.*	"
1860	Thurston, William H.	Oxford.
1862	Trumbull, John	Worcester.
1863	Taft, Calvin*	"

T.

Date.	Name.	Residence.
	Tainter, Harvey S.*	Worcester.
1864	Tainter, Mrs. Daniel	"
1864	Thayer, Alexander	"
1864	Taft, Mrs. Calvin	"
1865	Thompson, Simeon E.*	"
1865	Taft, Lyman J.*	"
1865	Taft, Mrs. Lyman J.	"
1865	Taft, Henry G.	"
1865	Turner, Mrs. Peter J.	"
1865	Taft, Edward C.	"
1865	Thayer, Benjamin	"
1865	Tower, Miss Addie L.	"
	Thayer, Perry	"
1866	Thayer, Horace*	"
1866	Thayer, Mrs. Horace	"
1866	Tainter, Mrs. E. C.	"
1867	Tainter, Ephraim C.	"
1867	Trask, Mrs. F. J.	Leicester.
1867	Tarbox, John L.	Worcester.
1870	Taylor, R. C.	"
1870	Townsend, Velette P.	"
1870	Thayer, Charles D.	"
1871	Thompson, C. O.*	"
1872	Tainter, Charles E.	"
1874	Thompson, Miss Ella G.	"
1876	Thurston, L. D.	Leicester.
1878	Tolman, Miss Mary	Worcester.
1883	Talbot, Thomas	"
1884	Tourtellott, Daniel C.	"

U.

Date.	Name.	Residence.
	Upham, George*	Worcester.
	Upham, Baylies*	"
	Underwood, Orison	Milford.
	Underwood, Austin	Westborough.
1866	Upham, Harvey G.	Worcester.
1870	Upham, Roger F.	"
1881	Upham, Mrs. Harvey G.	"

V.

Date.	Name.	Residence.
	Vaill, Edward W.	Worcester.

W.

Date.	Name.	Residence.
	Waldo, Hon. Daniel*	Worcester.
	Washburn, Ichabod*	"
	Workman, William, M. D.*	"
	Woodward, Rufus, M. D.*	"
	Wheeler, William A.*	"
	Washburn, Hon. Emory*	"
	White, James*	"

W.

Date.	Name.	Residence.
	Willard, Fitzroy*	Worcester.
	Whiting, Charles H.	"
	Williams, William A.	"
	Whittemore, Charles	"
	White, Charles*	"
	Walker, Asa*	"
	Walker, Benjamin	"
	Walker, Joseph, Jr.*	"
	Williams, Warren	"
	Ward, Artemas*	"
	Wheeler, Miss F. N.	"
	Wheeler, George W.*	"
	Wheeler, William F.	"
	Ward, Daniel	"
	Whiting, Charles B.	"
	Whittemore, Miss E. J.	"
	Whitcomb, John P.*	Harvard.
	Woodward, Samuel B., M.D.*	Worcester.
	Waters, Asa H.	Millbury.
	White, George W.	Cambridge.
	White, Alonzo	Leicester.
	Watson, Horace C.	"
	Woodcock, Josephus	"
	Woodcock, Lucius	"
	Whitin, Hon. Paul*	Whitinsville.
	Whitin, John C.*	"
	White, Charles	Northbridge.
	Wing, Hiram*	"
	Work, John W.*	Templeton.
	Weed, Jared*	Petersham.
	Whiting, B. D.	Boston.
	Whiting, B. G.	Lunenburg.
	Wheeler, Jonathan D.	Grafton.
	Wood, Samuel*	"
	Wheelock, William A.	Dudley.
	Wheaton, Henry S.*	California.
1854	Wheeler, Charles A.*	Worcester.
1854	Woodward, Josiah L.	Millbury.
1854	Willard, Mrs. Fitzroy*	Worcester.
1855	Whiting, Benjamin F.	"
1855	Williams, James Otis*	"
1855	Washburn, Henry S.	"
1855	Ward, Samuel D.	Shrewsbury.
1855	Whittier, Charles V.	Northbridge.
1856	Whitin, N. D.	"
1856	Wood, J. G.*	Millbury.
1856	Whiting, George W.	Worcester.
1857	Williams, Hartley*	"
1858	Woodward, Henry	"
1858	Woodward, Samuel	"
1859	Ward, Thomas W.	Shrewsbury.
1862	Willard, Calvin*	Worcester.
1862	Wyman, Mrs. Abby	"
1862	Wyman, Miss Nellie M.	"
1862	Wood, Newell	Millbury.
1863	Wheeler, William H.	Grafton.
1863	Warren, John M.*	Worcester.
1863	Washburn, Nathan	"
1863	White, William	"
1863	Whitcomb, Carter*	"
1863	Warren, Rufus C.	Grafton.
1863	Whittier, Mrs. Nellie S.	Worcester.
1863	Wing, Henry F.	Grafton.
1864	Works, Edwin D.	Fitchburg.
1864	Wheeler, Mrs. Nelson	Worcester.

W.

Date.	Name.	Residence.
1864	Wheeler, Henry A.	Worcester.
1864	White, Dea. Cyrus	Millbury.
1864	Workman, Miss Louisa J.	Worcester.
1864	Whipple, Franklin	Worcester.
1865	Woodcock, Theodore E.	Leicester.
1865	Wheeler, Mrs. Geo. W.	Worcester.
1865	Wheeler, Miss Mary G. B.	"
1865	Williams, Miss Henrietta F.	"
1865	Williams, Miss Mary E.	"
1865	Workman, Mrs. Wm.	"
1866	Wheeler, Miss Nancy*	"
1866	Wellington, Timothy W.*	"
1866	Wellington, Mrs. Timothy W.	"
1866	Wellington, Frederick W.*	"
1866	Whiting, Miss Mary F.*	"
1866	Whittier, Melvin O.	"
1866	Winn, Mrs. Francis	"
1866	Warren, John D.*	"
1867	Williams, Mrs. Hartley	"
1867	Whittemore, Mrs. Asa D.	"
1867	Willard, Miss Mary E.	"
1867	Wheeler, Erastus S.	Berlin.
1867	Wilson, George W.	Worcester.
1868	Ward, Mrs. Daniel	"
1868	Willard, Mrs. Calvin*	"
1868	Waite, Andrew J.	"
1869	Woodwell, Charles H.*	"
1870	Whittemore, Mrs. Charles	"
	Weston, Miss J. A.	"
1871	Washburn, John D.	"
1871	Witherby, L. B.	"
	Waters, Charles H.*	Groton.
1871	Willis, Clara	Worcester.
1872	White, Miss Lizzie	"
1872	Walker, Joseph H.	"
1872	Watson, L. S.	Leicester.
1872	Woodward, Mrs. Mary E.	Worcester.
1873	Whitcomb, G. Henry	Worcester.
1873	Whitcomb, Mrs. Abbie E.	"
1873	Ward, Frederick W.	"
1874	Whittier, Miss Mabelle E.	"
1874	Ward, Miss Ella H.	Shrewsbury.
1874	Williams, Mrs. Warren	Worcester.
1875	Workman, Dr. William Jr.	"
1879	Willard, Dr. Franklin B.	Boylston.
1880	Ward, Mrs. Thomas	Worcester.
1880	Watts, H. B.	Leicester.
1880	Wakefield, C. H.	Worcester.
1882	Woodis, Mrs. Julia	"
1882	Ward, Mrs. Austin W.	"
1882	Watts, Mrs. H. B.	Leicester.
1882	Wilson, Mrs. Abiel E.	Worcester.
1884	Wyman, O. B.	Shrewsbury.
1885	Wesson, Frederic H.	Worcester.

Y.

Date	Name.	Residence.
	Young, Loring*	Leicester.
1854	Young, Priestley	Worcester.
1864	Young, Mrs. Priestley*	"
1871	Young, Mrs. Julia	"

HONORARY MEMBERS.

Date.	Name.	Residence.
	Kenrick, John A.*	Newton.
	Kenrick, William*	"
	Walker, Samuel*	Roxbury.
	Wilder, Marshall P.	Dorchester.
	Warren, J. L. L. F.*	California.
	Winship, Jonathan*	Brighton.
	Winship, Francis*	"
	Breck, Joseph*	"
	Carter, William E.	Cambridge.
	Hovey, Charles M.	"
	Downing, Andrew J.*	Newburgh, N. Y.
	Downing, Charles*	Newburgh, N. Y.
	Cabot, Joseph S.*	Salem.
	Manning, Robert*	Salem.
	Meehan, Thomas	Germantown, Pa.
1871	Leroy, Andre*	Angers, France.
1871	Krelage, J. H.	Haarlem, Holland.
1876	Barry, Patrick	Rochester, N. Y.
1876	Warder, John A.*	Cleves, Ohio.
1876	Gray, Asa	Cambridge.
1876	Parkman, Francis	Boston.
1876	Strong, William C.	Brighton.
1876	Hyde, J. F. C.	Newton.
1876	Flint, Charles L.	Boston.
1876	Sargent, Charles S.	Brookline.
1876	Thomas, John J.	Union Springs, New York.

OFFICERS AND COMMITTEES

OF THE

WORCESTER COUNTY HORTICULTURAL SOCIETY,

FOR THE YEAR 1885-6.

PRESIDENT:

FRANCIS H. DEWEY, of Worcester.

VICE-PRESIDENTS:

STEPHEN SALISBURY, of Worcester; HENRY L. PARKER, of Worcester; GEORGE E. FRANCIS, of Worcester.

SECRETARY:

EDWARD WINSLOW LINCOLN, of Worcester.

LIBRARIAN AND TREASURER:

CHARLES E. BROOKS, of Worcester.

TRUSTEES (BY ELECTION):

Joseph C. Lovell,	West Boylston.	Newell Wood,	Millbury.
O. B. Wyman,	Shrewsbury.	David L. Fiske,	Grafton.
George Cruickshanks,	Fitchburg.	Thomas A. Dawson,	Worcester.
Charles E. Parker,	Holden.	Charles Greenwood,	"
James F. Allen,	Worcester.	J. Henry Hill,	"
Henry Woodward,	"	James Draper,	"
William T. Merrifield,	"	F. M. Marble,	"
William H. Earle,	"	William W. Cook,	"
H. M. Quimby,	"	Calvin L. Hartshorn,	"
Samuel Flagg,	"	Joseph Lovell,	"
Horatio Phelps,	"	Frederic G. Stiles,	"
Frank J. Kinney,	"	Edwin Morse,	"
John C. Newton,	"	Hermann F. A. Lange,	"
Emory Banister,	"	John Midgley,	"
John D. Lovell,	"	S. H. Record,	"
George F. Hoar,	"	Mrs. Daniel Tainter,	"
George Calvin Rice,	"	Mrs. John H. Coes,	"
O. B. Hadwen,	"	Mrs. T. L. Nelson,	"
William Eames,	"	Mrs. Adin A. Hixon,	"
Sylvanus Sears,	"	Mrs. Thomas Ward,	"
Henry Phelps,	"		

STANDING COMMITTEES.

ON FINANCE:

Nathaniel Paine, 1886. George E. Francis, 1887. Edward W. Lincoln, 1888.

ON LIBRARY AND PUBLICATION:

Edward W. Lincoln. Charles E. Brooks. Géorge E. Francis.

ON NOMENCLATURE:

James F. Allen, George E. Francis, Hermann F. A. Lange, O. B. Hadwen, James Draper, F. M. Marble, Charles Greenwood.

ON ARRANGEMENTS AND EXHIBITIONS:

James Draper, *Chairman*, Newell Wood, William W. Cook, Charles E. Parker, William H. Earle, Charles E. Brooks, Calvin L. Hartshorn, Hermann F. A. Lange, O. B. Hadwen, Adin A. Hixon, Charles Greenwood, F. M. Marble, O. B. Wyman, H. B. Watts, J. L. Peters, with *President* Dewey, and *Secretary* Lincoln.

JUDGES.

ON FLOWERS, PLANTS, ETC.

Hermann F. A. Lange.

ON FRUITS, ETC.

James Draper.

ON VEGETABLES, ETC.

Charles Greenwood.

SCHEDULE OF PREMIUMS

OFFERED BY THE

WORCESTER COUNTY

HORTICULTURAL SOCIETY,

FOR THE YEAR

1886.

The attention of Exhibitors is particularly called to the Rules and Regulations, General and Special.

Worcester, Mass.
CHARLES HAMILTON, PRINTER,
311 MAIN STREET.
1886.

COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS.

James Draper, *Chairman.*

Calvin L. Hartshorn,
Hermann F. A. Lange,
Newell Wood,
W. W. Cook,
O. B. Hadwen,
F. M. Marble,
O. B. Wyman,
Charles E. Parker,
William H. Earle,
Charles E. Brooks,
Adin A. Hixon,
Charles Greenwood,
H. B. Watts,
J. L. Peters,

President—Francis H. Dewey.

Secretary—Edward W. Lincoln,
Nos. 5 Oak, and 18 Front Streets.

JUDGES OF AWARD.

Flowers, Plants, Etc.—Hermann F. A. Lange.
Fruits, Etc.—James Draper.
Vegetables, Etc.—Charles Greenwood.

COMMITTEE ON NOMENCLATURE.

James F. Allen,
Hermann F. A. Lange,
George E. Francis,
O. B. Hadwen,
James Draper,
Charles Greenwood,
F. M. Marble.

GENERAL RULES FOR ALL EXHIBITIONS.

A. Strict conformity to the Regulations and Rules will be expected and required, as well for the benefit of Exhibitors as for the convenience of the Officers of the Society.

B. Correct and legible names must be attached to each and every Flower or Plant entered in a class of named varieties.

C. All articles offered for premium must remain within the Hall throughout the hours of Exhibition, unless special permission for their removal shall be granted by the Committee on Exhibitions, etc.

D. All *Small-Fruits* must be entered in boxes or baskets (except in the case of Strawberries, which are to be shown "*flat*"); but they may be displayed subsequently in plates or dishes, at the taste of the exhibitor.

E. No person can compete for more than one premium with the same variety of Flower or Fruit; nor can any person take more than one premium under the same number.

F. The Judges may correct, before the close of any Exhibition, awards made by them, if satisfied that such were erroneous.

G. The cards of competitors shall be put, reversed, beneath the plates; and the Judges of Award shall be excluded from the Hall of Exhibition until the Exhibition itself is ready for judgment.

H. Competitors are expected to conform strictly to the conditions under which articles are invited. Evasion or violation of them may be reported to the TRUSTEES for future disqualification of the offender.

RULES AND REGULATIONS.

1. Exhibitions will be held once a week as follows:—commencing March 4th, there will be Exhibitions every Thursday afternoon until and including October 28th, A. D. 1886. The hours of exhibition will be between 3 and 4.30 o'clock. Articles offered for premium must be in the Hall by 2.15 o'clock P. M. of the days of exhibition. Between 2.15 and 3 o'clock the Hall

will be in exclusive charge of the Secretary, and the Librarian, who will allow no one else to be present. The Judges of Award may be admitted under the limitations of GENERAL RULE G.

2. Competition for premiums is open to all; but a discount of one-third of the amount will be made from awards to persons who are not Members of the Society; and it is strictly required that all specimens offered for premium shall have been grown by the competitors, on their own premises, *within the County of Worcester*, for a period of at least one (1) month previous to the date of exhibition.

3. After the articles are arranged they will be under the exclusive charge of the Judges, and *not even the owners* will have liberty to *remove* them until the exhibition is closed; when they will be delivered as the contributors may direct.

4. No cards of a business nature will be allowed in any Exhibition.

5. Where a certain number or quantity of Plants, Flowers, Fruits or Vegetables is designated in the schedule, there must be neither more nor less than that number or quantity of specimens shown; and in no case can any other varieties than those named in the schedule be substituted.

6. It will be the duty of the Judges to *exclude from competition all inferior specimens.* Also, all such *Designs* as, in their opinion, evince an incorrect taste. The Judge of Fruits, in making Awards, will especially regard uniformity in size, symmetry of form, and beauty in color.

7. The Committee of Arrangements have power to change the time of exhibition for any article, if an earlier or later season renders such change necessary; and the Secretary is requested to give notice of one week, in some daily paper, and also at the preceding Exhibition, when a change in the Schedule is proposed.

8. All articles offered for premiums must be correctly named. Indefinite appellations, such as "Pippin," "Sweeting," "Greening," etc., will not be considered as names. Any person exhibiting the same variety of Fruit or Vegetables, under different

names, or exhibiting as grown by himself, Flowers, Fruit, or Vegetables grown by another, thereby violating the objects and rules of the Society, shall be debarred from competing for the Society's premiums until reinstated.

9. No Flowers, Plants, Fruits or Vegetables will be entitled to a premium unless they possess points of superiority; and the Judges are *strictly required* to withhold premiums if, in their opinion, the articles exhibited do not merit them; nor shall any specimen for which a premium has been once awarded, receive another during the season.

10. Competitors will be required to furnish information as to their mode of cultivation, and to present specimens, for trial and examination, if requested.

11. In all exhibitions of Cut Flowers, the use of foliage must be restricted to that of the varieties shown; and not more than three blooms, clusters or spikes, all which shall be of one color, and of one variety, shall be allowed in the same bottle, except when otherwise specified in the schedule.

12. No Judge shall award a premium or gratuity in any case wherein he is a competitor, or has an actual or resultant interest; in any such case the judgment shall be rendered by any three of the Committee on Arrangements and Exhibitions whom the Judge shall invite.

13. No Judge shall require anything of competitors respecting their exhibits, which is not distinctly specified in the schedule. No Flowers, Fruits, etc., etc., shall be put on the tables, for competition for premiums, by any person who is a judge as to the awards to be made for Fruits, Flowers, etc., etc.

14. The standard number required for an exhibit, whether of Fruits or Vegetables will be Twelve (12); unless otherwise specifically declared. The usual limit of measure, save for SMALL-FRUITS, will be a half peck.

15. All premiums that are not claimed within three months after the close of the official year shall be forfeited to the Society.

16. The awards will be made known as soon as the cards can be filled out and placed upon the tables.

17. "Downing's Fruits of America," revised edition, will guide the Judge of Fruits in his decisions upon matters at issue.

☞The Judges are authorized by the Trustees, to invite the assistance of competent and discreet persons in the discharge of their duties.

FLOWERS, PLANTS, FRUITS & VEGETABLES.

A. D. 1886.

☞ The Committee on Arrangements and Exhibitions would direct the earnest attention of the Judges to *Rule 6!*

6. *It will be the duty of the Judges to exclude from competition all inferior specimens. Also, all such designs as, in their opinion, evince an incorrect taste. The Judge of Fruits, in making Awards, will especially regard uniformity in size, symmetry of form, and beauty in color.*

FLORAL. Special Rule—In all cases where dimensions are prescribed for exhibits, the measure shall be understood to be that of the flowers, solely; never admitting the basket, foliage, or any garniture of green.

SPECIAL COMPETITION.

HYACINTHS.

☞ This Society is authorized by the "General Union for the Promotion of the Cultivation of Bulbs, of Haarlem, Holland," to offer the following prizes "to be competed for by nurserymen, seedsmen, and florists," in the Spring of 1886, viz:—

For Hyacinths.—Fifty (50) bulbs in fifty (50) pots, forced in pots, not more than two (2) of any one variety:—

First Prize.....*Gold Medal.*
Second Prize.....*Silver Gilt Medal.*
Third Prize.....*Silver Medal.*

This Special Competition will be held on Thursday, March 4th, prox., and will be strictly governed by the conditions specified in the offer by the "General Union."

Thursday, March 4.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at 4 o'clock, P. M., to hear motions, determine appeals, and act upon business properly submitted.*

HYACINTH,—IN BLOOM.—

No. 1.	Six plants, three premiums.....	$3 00	2 00	1 00
No. 2.	One plant, two premiums.....		1 00	50

PRIMULA SINENSIS,—IN BLOOM.—

No. 3.	Four plants, three premiums.....	$3 00	2 00	1 00
No. 4.	One plant, two premiums.....		1 00	50

CINERARIA,—IN BLOOM.—

No. 5.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

CYCLAMEN,—IN BLOOM.—

No. 6.	Four plants, three premiums.....	$3 00	2 00	1 00
No. 7.	One plant, three premiums.....	1 50	1 00	50

APPLE.—

No. 8.	Baldwin, three premiums.....	$1 50	1 00	50
No. 9.	Belleflower (Yellow), three premiums	1 50	1 00	50
No. 10.	Cogswell, two premiums.....		1 00	50
No. 11.	Greening (R. I.), three premiums.	1 50	1 00	50
No. 12.	Ladies' Sweet, two premiums....		1 00	50
No. 13.	Fameuse, three premiums.....	1 50	1 00	50
No. 14.	King, three premiums.....	1 50	1 00	50

PEAR.—

No. 15.	Easter, two premiums.....	$1 50	1 00
No. 16.	Any variety, named, gratuity.		

VEGETABLE.—

CABBAGE,

No. 17.	Brunswick, 3 specimens, three premiums	$1 50	1 00	50

SQUASH,

No. 18.	Marblehead, 3 specimens, three premiums	1 50	1 00	50

CELERY,

No. 19.	Six specimens, three premiums	1 50	1 00	50

Thursday, March 11.

CUT FLOWERS.—

No. 20.	Twenty blooms or clusters, distinct, in vases, three premiums	$3 00	2 00	1 00

APPLE.—

No. 21.	Golden Russet of Mass., three premiums		$1 50	1 00	50
No. 22.	Golden Russet—sweet, two premiums			1 00	50
No. 23.	Leicester Sweet, three premiums		1 50	1 00	50
No. 24.	Northern Spy, four premiums	2 00	1 50	1 00	50

PEAR.—

No. 25. Any variety, named, gratuity.

VEGETABLE.—

CABBAGE,

No. 26.	Savoy, 3 specimens, three premiums	$1 50	1 00	50

SQUASH,

No. 27.	Hubbard, 3 specimens, three premiums	1 50	1 00	50

TURNIP,

No. 28.	White Egg, 12 specimens, three premiums	1 50	1 00	50

Thursday, March 18.

ARUM (RICHARDIA),—IN BLOOM.—

No. 29.	Best collection; grown in a pot, or tub, not exceeding 16 in. in diameter, three premiums.....	$3 00	2 00	1 00
No. 30.	One bloom, with foliage (the largest), two premiums.....		1 00	50

BOUQUET—(HAND).—

No. 31.	Not more than 9 in. in diameter, three premiums.....	$3 00	2 00	1 00

APPLE.—

No. 32.	Peck, three premiums.....	$1 50	1 00	50
No. 33.	Sutton, three premiums.....	1 50	1 00	50
No. 34.	Tallman, three premiums.....	1 50	1 00	50

PEAR.—

No. 35. Any variety, named, gratuity.

VEGETABLE.—

CABBAGE,

No. 36.	Red Dutch, 3 specimens, three premiums	$1 50	1 00	50

TURNIP,

No. 37.	Swede, Yellow, 6 specimens, three premiums	1 50	1 00	50
No. 38.	Swede, White, 6 specimens, three premiums	1 50	1 00	50

Thursday, March 25.

AZALEA INDICA,—IN BLOOM.—

No. 39.	Three plants, three premiums....	$5 00	3 00	2 00
No. 40.	One plant, two premiums.....		3 00	2 00

APPLE.—

No. 41.	Palmer, two premiums..	$1 00		50
No. 42.	Lemon Greening, two premiums..	1 00		50

PEAR.—

No. 43. Any variety, named, gratuity.

VEGETABLE.—

	BEET,			
No. 44.	Turnip, three premiums.....	$1 50	1 00	50
	CARROT,			
No. 45.	Intermediate, three premiums....	1 50	1 00	50
	LETTUCE,			
No. 46.	Six heads, three premiums.....	2 00	1 50	1 00

Thursday, April 8.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at 4 o'clock, P. M., to hear motions, determine appeals, and act upon business properly submitted.*

CUT FLOWERS—BASKET.—

No. 47.	For the best round basket, on stand, not to exceed 15 inches in diameter, three premiums.....	$3 00	2 00	1 00
No. 48.	For the best stand, three premiums.	3 00	2 00	1 00

ZONALE GERANIUM,—IN BLOOM.—

No. 49.	Four plants, distinct in color, three premiums	$3 00	2 00	1 00

APPLE.—

No. 50.	Russet (Golden), three premiums..	$1 50	1 00	50
No. 51.	Russet (Red), three premiums....	1 50	1 00	50
No. 52.	Russet (Roxbury), three premiums	1 50	1 00	50

PEAR.—

No. 53. Any variety, named, gratuity.

VEGETABLE.—

PARSNEP,

No. 54.	(Hollow Crown), three premiums.	$1 50	1 00	50

RADISH,

No. 55.	Two bunches (6 in each bunch), three premiums.....	1 50	1 00	50

LETTUCE,

No. 56.	Six heads, three premiums.....	1 50	1 00	50

POTATO.—12 Specimens.

No. 57.	Clark's No. 1, three premiums...	1 50	1 00	50
No. 58.	Hebron, three premiums.....	1 50	1 00	50

Thursday, April 15.

BEGONIA,—IN BLOOM.—

No. 59.	One plant, three premiums.....	$3 00	2 00	1 00

CUT FLOWERS.—

No. 60.	Twenty VASES, not to exceed 5 blooms or clusters in each, three premiums.....	$3 00	2 00	1 00

APPLE.—

No. 61. Any variety, named, gratuity.

VEGETABLE.—

HORSE RADISH,

No. 62.	Three premiums.....	$1 50	1 00	50

PARSNEP,

No. 63.	(Student), three premiums.....	1 50	1 00	50

RHUBARB,

No. 64.	Same variety, three premiums...	1 50	1 00	50

Thursday, April 22.

PANSY,—NO DUPLICATES.—

No. 65. One stand, and one spike in a vial, three premiums $3 00 2 00 1 00

CUT FLOWERS.—

No. 66. HANDLE BASKET, low oval, not to exceed 15 inches in diameter, three premiums $3 00 2 00 1 00

APPLE.—

No. 67. Any variety, named, gratuity.

VEGETABLE.—

DANDELION—(cultivated),

No. 68. One half-peck, three premiums .. $1 50 1 00 50

SPINACH,

No. 69. One half-peck, three premiums .. 1 50 1 00 50

Thursday, April 29.

POT PLANTS,—IN BLOOM.—

No. 70. Gratuity.

VEGETABLE.—

LETTUCE,

No. 71. Six heads, three premiums $1 50 1 00 50

SALSIFY,

No. 72. Three premiums 1 50 1 00 50

Thursday, May 6.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at 4 o'clock, P. M., to hear motions, determine appeals and act upon business properly submitted.*

PANSY,—IN BLOOM.—

No. 73.	Six plants, distinct in color, exhibited in pots, three premiums	$3 00	2 00	1 00

BOUQUET,—HAND.—

No. 74.	Not to exceed 9 inches in diameter, three premiums	$3 00	2 00	1 00

VEGETABLE.—

	DANDELION,			
No. 75.	Half-peck (cultivated), three premiums	$1 50	1 00	50
	SPINACH,			
No. 76.	Half-peck, three premiums	1 50	1 00	50

Thursday, May 13.

BASKET,—ON STAND.—

No. 77.	Not to exceed fifteen inch, oval, with handle, three premiums	$3 00	2 00	1 00

BULBS AND TUBERS—(HARDY)—OPEN CULTURE.—

No. 78.	Display, in vases, three premiums	$3 00	2 00	1 00

HYACINTH,—OPEN CULTURE.—

No. 79.	Display, in vases, three premiums	$3 00	2 00	1 00

VEGETABLE.—

ASPARAGUS,

No. 80. Two bunches, three premiums ...$1 50 1 00 50

Thursday, May 20.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 81. Stand, three premiums.....$3 00 2 00 1 00

PELARGONIUM—(FANCY AND SHOW)—IN BLOOM.—

No. 82. Four plants, of distinct varieties, three premiums.....$3 00 2 00 1 00

TULIP,—OPEN CULTURE.—

No. 83. Display, in vases, three premiums.$3 00 2 00 1 00

VEGETABLE.—

RHUBARB,

No. 84. Linnæus, three premiums.....$1 50 1 00 50
No. 85. Victoria, three premiums..... 1 50 1 00 50

Thursday, May 27.

CUT FLOWERS—(FROM HARDY PLANTS AND SHRUBS).—

No. 86. For the best display, in vases, open culture, three premiums.....$3 00 2 00 1 00

AZALEA—(MOLLIS).—

No. 87. For the best display, in vases, three premiums $3 00 2 00 1 00

VEGETABLE.—

RADISH,

No. 88. Three premiums.....$1 50 1 00 50

ONION (bunched),

No. 89. Two bunches, six in each bunch, three premiums 1 50 1 00 50

Thursday, June 3.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at 4 o'clock, P. M., to hear motions, determine appeals, and act upon business properly submitted.*

FUCHSIA,—DISTINCT VARIETIES.—

No. 90. Four plants in bloom, three premiums $3 00 2 00 1 00

RHODODENDRON.—

No. 91. Best display, in vases, three premiums $3 00 2 00 1 00

AZALEA—GHENT.—

No. 92. Best display, in vases, three premiums $3 00 2 00 1 00

VEGETABLE.—

ASPARAGUS,

No. 93. Two bunches, three premiums....$1 50 1 00 50

CUCUMBER,

No. 94. Three specimens, three premiums.$1 50 1 00 50

Thursday, June 10.

CUT FLOWERS.—

No. 95.	One Stand—(the varieties of any species must not exceed three), three premiums	$3 00	2 00	1 00
No. 96.	One Vase,—the specimens not to be tied or wired, two premiums.		2 00	1 00

IRIS.—

No. 97.	Display, in vases, three premiums	$3 00	2 00	1 00

VEGETABLE.—

Spinach,

No. 98.	Half-peck, three premiums	$1 50	1 00	50

Thursday, June 17.

ROSES.—

[To be shown in the Boxes or Vases of the Society.]

No. 99.	For the best 12 blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums	$4 00	3 00	2 00
No. 100.	For the best 6 blooms or clusters of distinct named varieties of H. P. Roses, outdoor culture, three premiums	3 00	2 00	1 00
No. 101.	For the best stand of Roses, three premiums	3 00	2 00	1 00
No. 102.	Moss Roses. Best display, three premiums	3 00	2 00	1 00
No. 103.	For the best basket or dish of Roses, two premiums		2 00	1 00

PÆONIA.—

No. 104.	Display, in vases, three premiums,	$3 00	2 00	1 00

SWEET-WILLIAM.—*Dianthus barbatus.*—

No. 105.	Stand, three premiums	$3 00	2 00	1 00

STRAWBERRY.—

No. 106.	Crystal City, 24 berries, flat, three premiums	$1 50	1 00	50
No. 107.	Jersey Queen, 24 berries, flat, three premiums.....	1 50	1 00	50
No. 108.	Any other varieties, gratuity.			

VEGETABLE.—

	PEA,			
No. 109.	One-half peck, four premiums.....	$2 00	1 50	1 00	50
	LETTUCE,			
No. 110.	Six heads, three premiums,		1 50	1 00	50
	BEET,			
No. 111.	Early, 12 specimens, three premiums		1 50	1 00	50

Thursday, June 24.

HYDRANGEA,—ONE PLANT, IN BLOOM.—

No. 112.	Hortensis, two premiums.....	$2 00	1 00
No. 113.	Otaksa, two premiums.....	2 00	1 00
No. 114.	Thomas Hogg, two premiums...	2 00	1 00

BASKET.—Oval, flat, not to exceed 18 inches.

No. 115.	AMATEUR,—three premiums...	$3 00	2 00	1 00
No. 116.	FLORIST,—three premiums.....	3 00	2 00	1 00

BOUQUET—(PARLOR).—

No. 117.	AMATEUR,—three premiums....	$3 00	2 00	1 00
No. 118.	FLORIST,—three premiums.....	3 00	2 00	1 00

Digitalis. (FOXGLOVE).

No. 119.	Display, two premiums.....		$2 00	1 00

Campanula Media. (CANTERBURY BELL).

No. 120.	Display, two premiums.....		$2 00	1 00

PÆONIA.—

No. 121. Best display, gratuity.

STRAWBERRY.—

No. 122.	Bidwell, 24 berries, flat, three premiums	$1 50		1 00	50
No. 123.	Charles Downing, 24 berries, flat, four premiums	$2 00	1 50	1 00	50
No. 124.	Crescent, 24 berries, flat, three premiums		1 50	1 00	50
No. 125.	Cumberland Triumph, 24 berries, flat, three premiums.....		1 50	1 00	50
No. 126.	Sharpless, 24 berries, flat, four premiums.....	$2 00	1 50	1 00	50
No. 127.	Wilder, 24 berries, flat, three premiums		1 50	1 00	50
No. 128.	Wilson, 24 berries, flat, four premiums.....	$2 00	1 50	1 00	50
No. 129.	Any other variety, 24 berries, gratuity.				

VEGETABLE.—

PEA,

No. 130. American Wonder, one-half peck, three premiums.....$2 00 1 50 1 00

Thursday, July 1.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at 4 o'clock, P. M., to hear motions, determine appeals, and act upon business properly submitted.*

LILIUM.—

No. 131. For the best display, in vases, two premiums..... $2 00 1 00

CUT FLOWERS.—

No. 132. For the best arranged stand, without restriction as to foliage, varieties, or quantity of flowers, three premiums.....$3 00 2 00 1 00

HARDY FLOWERS.—BIENNIALS AND PERENNIALS.—

No. 133. Display, in vases, three premiums $3 00 2 00 1 00

STRAWBERRY.—

No. 134. Bidwell, 24 berries, flat, four premiums.....$2 00 1 50 1 00 50
No. 135. Jucunda, 24 berries, flat, four premiums..... 2 00 1 50 1 00 50
No. 136. Manchester, 24 berries, flat, three premiums.... 1 50 1 00 50
No. 137. Miner, 24 berries, flat, four premiums 2 00 1 50 1 00 50

No. 138.	Monarch, 24 berries, three premiums	$1 50	1 00	50
No. 139.	Triomphe de Gand, 24 berries, flat, three premiums	1 50	1 00	50
No. 140.	Any other variety, 24 berries, flat, gratuity.			

VEGETABLE.—

BEAN (Snap),

No. 141.	Green Pod, one-half peck, three premiums	$2 00	1 50	1 00

PEA,

No. 142.	McLean's Advancer, one-half peck, three premiums	$2 00	1 50	1 00

BEET,

No. 143.	Turnip-rooted, 12 specimens, three premiums	1 50	1 00	50

Thursday, July 8.

AQUILEGIA.—(COLUMBINE).—

No. 144.	For the best stand, three premiums	$3 00	2 00	1 00

CLEMATIS.—

No. 145.	Display, of not less than six named varieties, three premiums	$3 00	2 00	1 00

ZONALE GERANIUM.—

No. 146.	For the best stand, 1 truss in a vial, three premiums	$3 00	2 00	1 00

CUT FLOWERS.—(NAMED).—

No. 147.	Twenty vases, not to exceed 5 blooms or clusters in each, three premiums	$3 00	2 00	1 00
No. 148.	LILIUM CANDIDUM, 12 spikes, three premiums	3 00	2 00	1 00

RASPBERRY—(RED).—

No. 149.	Brandywine, one quart, three premiums	$1 50	1 00	50
No. 150.	Hansell, one quart, three premiums	1 50	1 00	50

RASPBERRY—BLACKCAP.—

No. 151.	Davison, one quart, two premiums		$1 00	50
No. 152.	Doolittle, one quart, two premiums		1 00	50

CHERRY.—

No. 153.	Any variety, one quart, three premiums	$1 50	1 00	50

CURRANT.—

No. 154.	Red Dutch, one quart, three premiums	$1 50	1 00	50
No. 155.	White Grape, one quart, three premiums	1 50	1 00	50
No. 156.	White Dutch, one quart, three premiums	1 50	1 00	50
No. 157.	Any other variety, one quart, gratuity.			

STRAWBERRY.—

No. 158. Any variety, 24 berries, flat, gratuity.

VEGETABLE.—

PEA,

No. 159.	Yorkshire Hero, three premiums	$2 00	1 50	1 00
No. 160.	Champion of England, three premiums	2 00	1 50	1 00
No. 161.	Any other variety, gratuity.			

CABBAGE,

No. 162. Three specimens, gratuity.

Thursday, July 15.

GLOXINIA,—IN POTS.—

No. 163.	Six varieties in bloom, three premiums	$3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 164.	Stand, three premiums	$3 00	2 00	1 00

HOLLYHOCK,—DOUBLE.—

No. 165.	For the best 20 blooms, in vases, three premiums	$3 00	2 00	1 00

IRIS KÆMPFERI.—

No. 166.	Display in vases, three premiums	$3 00	2 00	1 00

CURRANT.—

No. 167.	La Versaillaise, one quart, five premiums	$3 00	2 00	1 50	1 00	50
No. 168.	Red Dutch, one quart, five premiums	3 00	2 00	1 50	1 00	50
No. 169.	White Dutch, one quart, three premiums			1 50	1 00	50
No. 170.	White Grape, one quart, two premiums				1 00	50
No. 171.	Any other variety, gratuity.					

RASPBERRY.—

No. 172.	Brincklé's Orange, one quart, three premiums	$1 50	1 00	50
No. 173.	Clarke, one quart, three premiums	1 50	1 00	50
No. 174.	Franconia, one quart, three premiums	1 50	1 00	50
No. 175.	Hornét, one quart, three premiums	1 50	1 00	50
No. 176.	Hudson River Antwerp, one quart, three premiums	1 50	1 00	50
No. 177.	Northumberland, one quart, three premiums	1 50	1 00	50
No. 178.	Turner, one quart, three premiums	1 50	1 00	50
No. 179.	Cuthbert, one quart, three premiums	1 50	1 00	50
No. 180.	Herstine, one quart, three premiums	1 50	1 00	50
No. 181.	Any other variety, gratuity.			

BLACKCAP.—

No. 182.	Gregg, one quart, two premiums.		1 00	50
No. 183.	Mammoth Cluster, one quart, two premiums		1 00	50

VEGETABLE.—

POTATO,

No. 184.	Any named variety, 12 specimens, three premiums	$2 00	1 50	1 00

BEAN,

No. 185.	Wax—(snap), three premiums	2 00	1 50	1 00

Thursday, July 22.

FLOWERS,—SEEDLINGS OF 1885.—

No. 186.	Stand, three premiums	$3 00	2 00	1 00

BASKET.—Round, flat, not to exceed 18 in. in diameter.

No. 187.	AMATEUR,—three premiums	$3 00	2 00	1 00
No. 188.	FLORIST,—three premiums	3 00	2 00	1 00

PETUNIA.—One spray in each vial.

No. 189.	Stand, three premiums	$3 00	2 00	1 00

SWEET PEA.—*Best Varieties.*—

No. 190.	Stand,—not exceeding twelve stems in a bottle, three premiums.	$3 00	2 00	1 00

RASPBERRY.—

No. 191. Any variety, one quart, gratuity.

BLACKBERRY.—

No. 192.	Kittatinny, one quart, two premiums	$1 00	50
No. 193.	Snyder, one quart, two premiums.	1 00	50
No. 194.	Wachusett, one quart, two premiums	1 00	50
No. 195.	Any other variety, gratuity.		

VEGETABLE.—

CABBAGE,

No. 196.	Brunswick, 3 specimens, three premiums	$1 50	1 00	50
No. 197.	Henderson, three premiums	1 50	1 00	50

CORN,

No. 198.	(Sweet), any named variety, three premiums	$2 00	1 50	1 00

SQUASH,

No. 199.	Three Summer Crookneck, two premiums		$1 00	50
No. 200.	Three Scallop, two premiums		1 00	50

TOMATO,

No. 201.	Any named variety, three premiums	$2 00	1 50	1 00

Thursday, July 29.

CUT FLOWERS,—GROWN FROM SEED. *By Exhibitor.*

No. 202.	Stand of distinct varieties, three premiums	$3 00	2 00	1 00

BOUQUET—PARLOR.—Not to exceed 15 in. from base to tip.

No. 203.	AMATEUR,—three premiums	$3 00	2 00	1 00
No. 204.	FLORIST,—three premiums	3 00	2 00	1 00

PHLOX DRUMMONDI.—

No. 205.	Stand of best varieties, three premiums	$3 00	2 00	1 00

VERBENA,—BEST VARIETIES.—

No. 206.	Stand, one truss in a vial, three premiums	$3 00	2 00	1 00

PEAR.—

No. 207.	D'Eté, three premiums	$1 50	1 00	50

GOOSEBERRY.—

No. 208. One quart of any named variety, gratuity.

VEGETABLE.—

BEAN,

No. 209.	Dwarf Horticultural (shell), half-peck, three premiums	$1 50	1 00	50	
No. 210.	Any other (named) variety, three premiums	1 50	1 00	50	

CORN,

No. 211.	(Sweet), three premiums	1 50	1 00	50	

POTATO—12 specimens.

No. 212.	Hebron, three premiums	$1 50	1 00	50	
No. 213.	Rose, three premiums	1 50	1 00	50	
No. 214.	Sunrise, three premiums	1 50	1 00	50	
No. 215.	Potentate, three premiums	1 50	1 00	50	
No. 216.	Ohio, three premiums	1 50	1 00	50	
No. 217.	Maine, three premiums	1 50	1 00	50	

Thursday, August 5.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at 4 o'clock, P. M., to hear motions, determine appeals, and act upon business properly submitted.*

HOLLYHOCK.—

No. 218.	For the best display, a single spike in a vase (no duplicates), four premiums	$4 00	3 00	2 00	1 00

CUT FLOWERS,—DISTINCT VARIETIES, NAMED.—

No. 219.	Twenty blooms, or clusters, in vases, three premiums	$3 00	2 00	1 00	

GLADIOLUS.—

No. 220.	Twenty vases, one spike each, three premiums	$3 00	2 00	1 00	

APPLE.—

No. 221. Any variety, gratuity.

PEAR.—

No. 222. Giffard, three premiums.....$1 50 1 00 50

VEGETABLE.—

CORN,

No. 223. Crosby, two premiums..... $1 50 1 00

CUCUMBER,

No. 224. 3 specimens, two premiums..... 1 00 50

TOMATO,

No. 225. Acme, three premiums..... 1 50 1 00 50

Thursday, August 12.

ANTIRRHINUM,—SNAP DRAGON.—

No. 226. Stand, best varieties, three premiums $3 00 2 00 1 00

GERMAN STOCKS,—BEST VARIETIES.—

No. 227. Stand, three premiums..... $3 00 2 00 1 00

BEGONIA—(TUBEROUS-ROOTED),—IN BLOOM.—

No. 228. Best six plants, in pots, three premiums $3 00 2 00 1 00

PINK—(ALL KINDS.)—

No. 229. Stand, three premiums.....$3 00 2 00 1 00

APPLE.—

No. 230.	Astrachan (Red), three premiums	$1 50	1 00	50
No. 231.	Oldenburg, three premiums	1 50	1 00	50

PEAR.—

No. 232.	Giffard, four premiums	$2 00	1 50	1 00	50

VEGETABLE.—

BEAN (shell),

No. 233.	Concord, half-peck, in pods, two premiums		$1 50	1 00

TOMATO,

No. 234.	Livingston's Perfection, three premiums	1 50	1 00	50

Thursday, August 21.

ASTER.—

No. 235.	Rose, 20 vials, one spray in each, three premiums	$2 00	1 00	50
No. 236.	Hedgehog, 20 vials, one spray in each, three premiums	2 00	1 00	50
No. 237.	Cocardeau (Crown), 20 vials, one spray in each, three premiums	2 00	1 00	50
No. 238.	Victoria, 20 vials, one spray in each, three premiums	2 00	1 00	50
No. 239.	Boltzés, 20 vials, one whole plant in each, three premiums	2 00	1 00	50
No. 240.	POMPON, stand, one spray in each vial, three premiums	3 00	2 00	1 00
No. 241.	TRUFFANT, — PÆONY-FLOWERED, stand, one spray in each vial, three premiums	3 00	2 00	1 00

GLADIOLUS—(DISTINCT VARIETIES.)—

No. 242.	Twenty vases, 1 spike each, three premiums	$4 00	3 00	2 00

SALPIGLOSSIS.—

No. 243.	For the best stand, three premiums	$3 00	2 00	1 00

APPLE.—

No. 244.	Astrachan, three premiums	$1 50	1 00	50
No. 245.	Oldenburg, three premiums	1 50	1 00	50
No. 246.	Tetofsky, three premiums	1 50	1 00	50
No. 247.	Sweet Bough, three premiums	1 50	1 00	50

APRICOT.—

No. 248.	Any variety, gratuity		$1 00	50

PEAR.—

No. 249.	Clapp's Favorite, four premiums	$2 00	1 50	1 00	50

PEACH.—

No. 250.	Alexander, three premiums	$1 50	1 00	50
No. 251.	Beatrice, three premiums	1 50	1 00	50
No. 252.	Cole's Early Red, two premiums.		1 00	50
No. 253.	Waterloo, two premiums		1 00	50

VEGETABLE.—

SQUASH,

No. 254.	Marrow, 3 specimens, three premiums	$1 50	1 00	50
No. 255.	Turban, 3 specimens, three premiums	2 00	1 50	1 00

TOMATO,

No. 256.	Paragon, three premiums.....	1 50	1 00	50

CORN,

No. 257.	(Sweet), 12 ears, of not less than twelve rows, three premiums..	1 50	1 00	50

Thursday, August 26.

CUT FLOWERS.—

No. 258.	Stand, three premiums.....	$3 00	2 00	1 00

DELPHINIUM.—

No. 259.	Stand, best varieties, three premiums	$3 00	2 00	1 00

GERANIUM.—

No. 260.	Stand, one truss in each vial, three premiums	$3 00	2 00	1 00

GLADIOLUS—(NO DUPLICATES.)—

No. 261.	Twenty vases, one spike in each, three premiums.....	$3 00	2 00	1 00

PHLOX—PERENNIAL.—

No. 262.	Display, in vases, three premiums	$3 00	2 00	1 00

APPLE.—

No. 263.	Somerset, three premiums.....	$1 50	1 00	50
No. 264.	Williams, three premiums.....	1 50	1 00	50

PEAR.—

No. 265.	Clapp's Favorite, five premiums...	$3 00	2 00	1 50	1 00	50
No. 266.	Rostiezer, three premiums.....		1 50	1 00	50
No. 267.	Tyson, three premiums.....		1 50	1 00	50

PEACH.—

No. 268.	Hale, three premiums.....	$1 50	1 00	50
No. 269.	Rivers, three premiums.....	1 50	1 00	50

VEGETABLE.—

BEAN—(HALF-PECK, IN POD.)—

No. 270.	Horticultural (pole), three premiums	$1 50	1 00	50

Thursday, September 3.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at* 4 *o'clock, P. M., to hear motions, determine appeals, and act upon business properly submitted.*

BALSAM.—

No. 271.	Twenty vases, one spike in each, three premiums.....	$3 00	2 00	1 00

SCABIOSA.—

No. 272.	Stand, not exceeding 6 flowers in a vial, best variety, three premiums	$3 00	2 00	1 00

ZINNIA.—

No. 273.	Stand, at least twelve varieties, one flower in a vial, three premiums	$3 00	2 00	1 00

LILIUM SPECIOSUM.—

No. 274.	Best display, in vases, three premiums	$3 00	2 00	1 00

MARIGOLD.—

No. 275.	Stand, three premiums	$3 00	2 00	1 00

APPLE.—

No. 276.	Williams, three premiums	$1 50	1 00	50
No. 277.	Foundling, two premiums		1 00	50

NECTARINE.—

No. 278.	Any variety, two premiums		$1 00	50

PEAR.—

No. 279.	Assomption, three premiums	$1 50	1 00	50
No. 280.	Tyson, two premiums		1 50	1 00
No. 281.	Petite Marguerite, two premiums		1 00	50

PEACH.—

No. 282.	Cooledge, two premiums		$1 00	50
No. 283.	George Fourth, two premiums		1 00	50
No. 284.	Foster, two premiums		1 00	50
No. 285.	Richmond, two premiums		1 00	50

PLUM.—

No. 286.	Imperial Gage, two premiums		$1 00	50
No. 287.	Quackenboss, two premiums		1 00	50
No. 288.	Washington, two premiums		1 00	50
No. 289.	Bradshaw, two premiums		1 00	50
No. 290.	Gen. Hand, two premiums		1 00	50
No. 291.	Victoria, two premiums		1 00	50

VEGETABLE.—

No. 292.	Best collection, three premiums	$4 00	3 00	2 00

Thursday, September 9.

CUT FLOWERS.—

No. 293.	Stand, three premiums	$3 00	2 00	1 00

BOUQUET—(PARLOR.)—

Best, loosely arranged.

No. 294.	AMATEUR, three premiums	$3 00	2 00	1 00
No. 295.	FLORIST, three premiums	3 00	2 00	1 00

DAHLIA.

LARGE-FLOWERED,

No. 296.	Twenty vases, one spray in each, three premiums	$3 00	2 00	1 00

POMPON,

No. 297.	Twenty vases, one spray in each, three premiums	3 00	2 00	1 00

SINGLE,

No. 298.	Six vases, one spray in each, two premiums		1 00	50

NASTURTIUM AND TROPÆOLUM.—

No. 299.	Stand, best varieties, not more than twelve blooms in each bottle, three premiums	$3 00	2 00	1 00

APPLE.—

No. 300.	Worcester Spy, two premiums		$1 00	50

APPLE—(CRAB.)—

No. 301.	Transcendent, 24, three premiums	$1 50	1 00	50

PEAR.—

No. 302.	Ansault, three premiums	$1 50	1 00	50
No. 303.	Bartlett, three premiums	1 50	1 00	50
No 304.	Earle's Bergamot, three premiums	1 50	1 00	50
No. 305.	St. Ghislain, four premiums	2 00	1 50	1 00	50

PEACH.—

No. 306.	Crawford (Early), two premiums.	$1 00	50
No. 307.	Oldmixon, two premiums	1 00	50

PLUM.—

No. 308.	Jefferson, two premiums	$1 00	50
No. 309.	Lombard, two premiums	1 00	50
No. 310.	Munroe, two premiums	1 00	50
No. 311.	McLaughlin, two premiums	1 00	50

VEGETABLE.

CUCUMBER,

No. 312.	Half-peck (for pickles), three premiums	$1 50	1 00	50

BEAN,

No. 313.	LIMA (large), half-peck, three premiums	1 50	1 00	50

PEPPER.—12 specimens.

No. 314.	Squash, two premiums	$1 00	50
No. 315.	Large Bell, two premiums	1 00	50
No. 316.	Mammoth, two premiums	1 00	50

Thursday, September 16.

CUT FLOWERS,—DISTINCT VARIETIES.—

No. 317.	Twenty vases, one bloom or cluster in each, three premiums	$3 00	2 00	1 00

GERANIUM,—OPEN CULTURE.—One truss in a vial.—

No. 318.	Stand, three premiums.....	$3 00	2 00	1 00

PANSY,—WITH FOLIAGE.—

No. 319.	Stand, one spike in each bottle, three premiums.....	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 320.	Combination, three premiums...	$3 00	2 00	1 00

APPLE.—

No. 321.	Golden Sweet, three premiums..	$1 50		1 00	50
No. 322.	Gravenstein, four premiums	$2 00	1 50	1 00	50

PEAR.—

No. 323.	Bartlett, five premiums	$3 00	2 00	1 50	1 00	50
No. 324.	Lucrative, three premiums.....			1 50	1 00	50
No. 325.	Pratt, two premiums.....				1 00	50

PLUM.—

No. 326.	Coe's Golden Drop, two premiums	$1 00	50
No. 327.	Reine Claude de Bavay, two premiums	1 00	50

PEACH.—

No. 328.	Crawford (Early), two premiums.	$1 00	50
No. 329.	Oldmixon, two premiums.....	1 00	50

MELON.—

No. 330.	Yellow Flesh, three specimens, two premiums		$1 00	50
No. 331.	Green Flesh, three specimens, two premiums		1 00	50
	WATER,			
No. 332.	Two specimens, two premiums		1 00	50

VEGETABLE.—

	CABBAGE,			
No. 333.	Deep Head, 3 specimens, three premiums	$1 50	1 00	50
	MARTYNIA—24 specimens.—			
No. 334.	Two premiums		$1 00	50

Thursday, September 23.

ASTER.—

No. 335.	Display, in vases, three premiums	$3 00	2 00	1 00

BASKET—(CUT FLOWERS).—

Not to exceed fifteen inches, oval, with handle, on stand.

No. 336.	AMATEUR, three premiums	$3 00	2 00	1 00
No. 337.	FLORIST, three premiums	3 00	2 00	1 00

VERBENA.—

No. 338.	Stand, three premiums	$3 00	2 00	1 00

CUT FLOWERS—Stand.—

No. 339.	Three premiums.....	$3 00	2 00	1 00

APPLE.—

No. 340.	American Beauty, three premiums	1 50	1 00	50
No. 341.	Garden Royal, three premiums..	1 50	1 00	50
No. 342.	Porter, four premiums...$2 00	1 50	1 00	50

APPLE—Crab.—

No. 343.	Hyslop, 24, two premiums.....		$1 00	50

PEAR.—

No. 344.	Boussoc, two premiums.....		$1 00	50
No. 345.	Durandeau, three premiums....	1 50	1 00	50
No. 346.	Merriam, three premiums.....	1 50	1 00	50
No. 347.	Paradis d'Automne, four premiums $2 00	1 50	1 00	50
No. 348.	Seckel, three premiums.....	1 50	1 00	50
No. 349.	Any other variety, two premiums		1 00	50

PEACH.—

No. 350.	Crawford (Late), two premiums.		$1 00	50
No. 351.	Salway (free), two premiums....		1 00	50
No. 352.	Smock, two premiums.....		1 00	50
No. 353.	Stump the World, two premiums.		1 00	50
No. 354.	Any other variety, two premiums.		1 00	50
No. 355.	New Seedling, originated in Worcester County, three premiums	1 50	1 00	50

GRAPE.—

No. 356.	Brighton, three clusters, three premiums	$1 50	1 00	50
No. 357.	Iona, three clusters, three premiums.....	1 50	1 00	50
No. 358.	Lady, three clusters, three premiums	1 50	1 00	50

No. 359.	Lindley, three premiums	$1 50	1 00	50
No. 360.	Massasoit, three clusters, three premiums	1 50	1 00	50
No. 361.	Moore, three clusters, three premiums	1 50	1 00	50
No. 362.	Prentiss, three clusters, three premiums	1 50	1 00	50
No. 363.	Salem, three clusters, three premiums	1 50	1 00	50
No. 364.	Wilder, three clusters, three premiums	1 50	1 00	50
No. 365.	Worden, three clusters, three premiums	1 50	1 00	50

VEGETABLE.—

CARROT,

No. 366.	Any variety, two premiums	$1 50	1 00	50

EGG PLANT,

No. 367.	Three specimens, three premiums	2 00	1 50	1 00

CABBAGE,

No. 368.	Red, 3 specimens, three premiums	1 50	1 00	50
No. 369.	Savoy, 3 specimens, three premiums	1 50	1 00	50

Thursday, September 30.

BASKET—(CUT FLOWERS.)—

Not to exceed fifteen in. in diameter, flat, oval.

No. 370.	AMATEUR,—three premiums	$3 00	2 00	1 00
No. 371.	FLORIST,— three premiums	3 00	2 00	1 00

STAND—(Cut Flowers.)—

No. 372.	Three premiums.....	$3 00	2 00	1 00

GLADIOLUS.—

No. 373.	Best display, in vases, three premiums	$3 00	2 00	1 00

APPLE.—

No. 374.	Gravenstein, five premiums	$3 00	2 00	1 50	1 00	50
No. 375.	Holden, three premiums.....			1 50	1 00	50
No. 376.	Lyscom, three premiums.....			1 50	1 00	50
No. 377.	Twenty Ounce, three premiums.			1 50	1 00	50

PEAR.—

No. 378.	Hardy, three premiums.....			$1 50	1 00	50
No. 379.	Louise Bonne de Jersey, five premiums...	$3 00	2 00	1 50	1 00	50
No. 380.	Seckel, five premiums.....	3 00	2 00	1 50	1 00	50
No. 381.	St. Michel Archange, two premiums.....				1 00	50
No. 382.	Washington, two premiums.....				1 00	50
No. 383.	Buffum, two premiums.....				1 00	50

PEACH.—

No. 384. Any variety, gratuity.

GRAPE.—

No. 385.	Concord, three clusters, three premiums			$2 00	1 00	50
No. 386.	Delaware, four premiums.	2 00	1 50	1 00	50
No. 387.	Duchesse, two premiums.....			1 00	50
No. 388.	Pocklington, two premiums.....			1 00	50
No. 389.	Niagara, two premiums.....			1 00	50
No. 390.	Any other variety, gratuity.				

VEGETABLE.—

No. 391.	Collection, three premiums	$4 00	3 00	2 00
	CAULIFLOWER,			
No. 392.	Three specimens, two premiums		$1 50	1 00

Thursday, October 7.

☞ *The* COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS *will meet, at 4 o'clock, P. M., to hear motions, determine appeals and act upon business properly submitted.*

CUT FLOWERS.—

No. 393.	Stand, three premiums	$3 00	2 00	1 00

FLOWERS AND FRUIT.—

No. 394.	Combination, three premiums	$3 00	2 00	1 00

APPLE.—

No. 395.	Hubbardston, four premiums	$2 00	1 50	1 00	50
No. 396.	Maiden's Blush, three premiums		1 50	1 00	50
No. 397.	Washington Strawberry, two premiums			1 00	50
No. 398.	Any other variety, gratuity.				

PEAR.—

No. 399.	Bosc, five premiums	$3 00	2 00	1 50	1 00	50
No. 400.	Dr. Reeder, 3 premiums			1 50	1 00	50
No. 401.	Sheldon, five premiums	3 00	2 00	1 50	1 00	50
No. 402.	Superfin, four premiums	2 00	1 50	1 00		50
No. 403.	Any other variety, gratuity.					

GRAPE,—OPEN CULTURE.—

No. 404.	Diana, three clusters, three premiums	1 50	1 00	50
No. 405.	Any variety, three clusters, gratuity.			

QUINCE.—

No. 406.	Champion, three premiums	$1 50	1 00	50
No. 407.	Orange, three premiums	1 50	1 00	50

VEGETABLE.—

POTATO,

No. 408.	Six varieties (named), 12 specimens of each, three premiums	$2 00	1 50	1 00

SQUASH,

No. 409.	Hubbard, 3 specimens, three premiums	1 50	1 00	50
No. 410.	Marblehead, three premiums	1 50	1 00	50
No. 411.	Essex Hybrid, three premiums	1 50	1 00	50

CELERY,

No. 412.	Six, three premiums	2 00	1 00	50

Thursday, October 14.

CUT FLOWERS.—(BOUQUET.)—

No. 413.	Style, flat, mantle, not to exceed twelve inches from base to tip, three premiums	$3 00	2 00	1 00

APPLE.—

No. 414.	Tompkins King, four premiums	$2 00	1 50	1 00	50
No. 415.	Leicester Sweet, three premiums	1 50	1 00	50

No. 416.	Wealthy, two premiums.....		1 00	50
No. 417.	Fameuse, three premiums.....	1 50	1 00	50
No. 418.	Any other variety (named), gratuity.			

PEAR.—

No. 419.	Bosc, four premiums....	$2 00	1 50	1 00	50
No. 420.	Dix, three premiums.....		1 50	1 00	50
No. 421.	Marie Louise, three premiums...		1 50	1 00	50
No. 422.	Onondaga, three premiums.....		1 50	1 00	50
No. 423.	Frederick Clapp, two premiums.			1 00	50

GRAPE,—OPEN CULTURE.—

No. 424.	Any variety, three clusters, three premiums	$1 50	1 00	50

QUINCE.—

No. 425.	Any variety (named), three premiums	$3 00	2 00	1 00

VEGETABLE.—

No. 426.	KOHL RABI, six specimens, three premiums	$1 50	1 00	50

ONION.—

No. 427.	Red Globe—Half peck, three premiums	1 50	1 00	50
No. 428.	Yellow Danvers—Half peck, three premiums.....	1 50	1 00	50

SALSIFY.—

No. 429.	Three premiums.....	$1 50	1 00	50

Thursday, October 21.

CUT FLOWERS.—

No. 430. In any form, gratuity.

APPLE.—

No. 431.	McClellan, three premiums.....	$1 50	1 00		50
No. 432.	Sutton, three premiums.....	1 50	1 00		50
No. 433.	R. I. Greening, five premiums	$3 00	2 00	1 50	1 00	50
No. 434.	Any other variety (named), gratuity.				

PEAR.—

No. 435.	Anjou, five premiums	$3 00	2 00	1 50	1 00	50
No. 436.	Diel, three premiums.....	1 50	1 00			50
No. 437.	Comice, five premiums	3 00	2 00	1 50	1 00	50
No. 438.	Urbaniste, four premiums	2 00	1 50	1 00		50
No. 439.	Mt. Vernon, two premiums.....			1 00		50

VEGETABLE.—

No. 440.	Collection grown from seed that was itself raised by the competitors, three premiums...	$3 00	2 00	1 00

Thursday, October 28.

FERN—(PARLOR).—

No. 441.	Best plant, three premiums.....	$2 00	1 00	50

PALM—(PARLOR).

No. 442.	Best plant, three premiums.....	$2 00	1 00	50

POT PLANTS—IN BLOOM.—

No. 443. Gratuity.

APPLE.—

No. 444.	Baldwin, six premiums	$4 00	3 00	2 00	1 50	1 00	50
No. 445.	Canada Red (Old Nonesuch), three premiums				1 50	1 00	50
No. 446.	Mother, three premiums				1 50	1 00	50
No. 447.	Northern Spy, five premiums		3 00	2 00	1 50	1 00	50
No. 448.	Roxbury Russet, four premiums			2 00	1 50	1 00	50
No. 176.	Belle Flower, three premiums				1 50	1 00	50

PEAR.—

No. 450.	Clairgeau, three premiums	$1 50	1 00	50
No. 451.	Langelier, three premiums	1 50	1 00	50
No. 452.	Dana's Hovey, three premiums	1 50	1 00	50
No. 453.	Duchesse d'Angoulême, four premiums	$2 00	1 50	1 00	50
No. 454.	Glou Morçeau, three premiums	1 50	1 00	50
No. 455.	Josephine de Malines, three premiums	1 50	1 00	50
No. 456.	Lawrence, five premiums	3 00	2 00	1 50	1 00	50
No. 457.	Winter Nelis, four premiums	2 00	1 50	1 00	50

VEGETABLE.—

Collection,

No. 458.	Four premiums	$4 00	3 00	2 00	1 00

Celeriac,

No. 459.	Six specimens, three premiums	1 50	1 00	50

Celery,

No. 460.	Four premiums	4 00	3 00	2 00	1 00

SPECIAL CHRYSANTHEMUM EXHIBITION

ON

Thursday, November 11.

No. 1. For the best six Chinese, or large-flowered, in pots,—distinct named varieties, five premiums.....
$6 00 5 00 4 00 3 00 2 00

No. 2. For the best six Japanese, in pots, distinct named varieties, five premiums.....
$6 00 5 00 4 00 3 00 2 00

No. 3. For tbe best six Pompon, in pots, distinct named varieties, five premiums.....
$6 00 5 00 4 00 3 00 2 00

No. 4. For the best three plants, in pots, from Amateurs,—distinct (not named), four premiums.....
$3 00 2 00 1 50 1 00

No. 5. For the best display, in pots, any variety, four premiums .....
$8 00 6 00 4 00 2 00

No. 6. For Specimen Plant, of any variety, four premiums..
$4 00 3 00 2 00 1 00

No. 7. For twelve Cut Blooms of Japanese, named, with long stems and foliage, in vases, three premiums...
$3 00 2 00 1 00

No. 8. For twelve Cut Blooms of Chinese, or large-flowered, named, with long stems and foliage, in vases, three premiums.....
$3 00 2 00 1 00

No. 9. For twenty-four sprays Chinese or Japanese, named, not less than twelve varieties, in vases, four premiums $5 00 4 00 3 00 2 00

No. 10. For twenty-four sprays Pompons, named, not less than twelve varieties, in vases, three premiums.... $3 00 2 00 1 00

The sum of Sixteen Dollars may be awarded in gratuities for meritorious exhibits.

☞ This Exhibition will be open to the public from 2 o'clock, P. M., until 10 o'clock, P. M. Solely to diminish the crowd that has rendered past similar Exhibitions so uncomfortable, at the same time defeating their object, ten cents will be charged for admission. Any sum, thus raised, will be applied to promote the culture and display of the Chrysanthemum.

N. B. All articles, intended for this Special Exhibition, must be in the Hall, and ready for inspection by the Judge, by twelve o'clock, M., precisely, of the day of the Exhibition.

By authority of the

COMMITTEE ON ARRANGEMENTS AND EXHIBITIONS.

Attest:

EDWARD WINSLOW LINCOLN,

Secretary.